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# 1.3 nuid 1.0.1

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## 1.6 queue 1.1.0

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## 1.7 robfig-cron 3.0.1

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/\* zlib.h -- interface of the 'zlib' general purpose compression library  
version 1.2.11, January 15th, 2017

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Martin Richards  
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/\* zlib.h -- interface of the 'zlib' general purpose compression library  
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\*\* Create:

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```
<Project Sdk="Microsoft.NET.Sdk">
```

```
<PropertyGroup>
```

```
<OutputType>Exe</OutputType>
```

```
<ApplicationManifest>App.manifest</ApplicationManifest>
```

```
</PropertyGroup>
```

```
<ItemGroup>
```

```
<Compile Include="Program.cs" />
```

```
<Compile Include="..\..\ServerContracts/Server.CoClasses.cs" />
```

```
<Compile Include="..\..\ServerContracts/Server.Contracts.cs" />
```

```
<Compile Include="..\..\ServerContracts/ServerGuids.cs" />
```

```
</ItemGroup>
```

```
<ItemGroup>
```

```
<ProjectReference Include="..\..\NativeServer/CMakeLists.txt" />
```

```
<ProjectReference Include="$(TestSourceDir)Common/CoreCLRTestLibrary/CoreCLRTestLibrary.csproj" />
```

```
</ItemGroup>
```

```
</Project>
```

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## 1.11 idna 3.2

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## 1.12 python-requests 2.26.0

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## 1.20 sarama 1.26.3

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## 1.23 driver-postgres 1.0.8

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The implementations of GSSAPI mechglue in GSSAPI-SPNEGO in "src/lib/gssapi", including the following files:

lib/gssapi/generic/gssapi\_err\_generic.et  
lib/gssapi/mechglue/g\_accept\_sec\_context.c  
lib/gssapi/mechglue/g\_acquire\_cred.c  
lib/gssapi/mechglue/g\_canon\_name.c  
lib/gssapi/mechglue/g\_compare\_name.c  
lib/gssapi/mechglue/g\_context\_time.c  
lib/gssapi/mechglue/g\_delete\_sec\_context.c  
lib/gssapi/mechglue/g\_dsp\_name.c  
lib/gssapi/mechglue/g\_dsp\_status.c  
lib/gssapi/mechglue/g\_dup\_name.c

lib/gssapi/mechglue/g\_exp\_sec\_context.c  
lib/gssapi/mechglue/g\_export\_name.c  
lib/gssapi/mechglue/g\_glue.c  
lib/gssapi/mechglue/g\_imp\_name.c  
lib/gssapi/mechglue/g\_imp\_sec\_context.c  
lib/gssapi/mechglue/g\_init\_sec\_context.c  
lib/gssapi/mechglue/g\_initialize.c  
lib/gssapi/mechglue/g\_inquire\_context.c  
lib/gssapi/mechglue/g\_inquire\_cred.c  
lib/gssapi/mechglue/g\_inquire\_names.c  
lib/gssapi/mechglue/g\_process\_context.c  
lib/gssapi/mechglue/g\_rel\_buffer.c  
lib/gssapi/mechglue/g\_rel\_cred.c  
lib/gssapi/mechglue/g\_rel\_name.c  
lib/gssapi/mechglue/g\_rel\_oid\_set.c  
lib/gssapi/mechglue/g\_seal.c  
lib/gssapi/mechglue/g\_sign.c  
lib/gssapi/mechglue/g\_store\_cred.c  
lib/gssapi/mechglue/g\_unseal.c  
lib/gssapi/mechglue/g\_userok.c  
lib/gssapi/mechglue/g\_utils.c  
lib/gssapi/mechglue/g\_verify.c  
lib/gssapi/mechglue/gssd\_pname\_to\_uid.c  
lib/gssapi/mechglue/mglueP.h  
lib/gssapi/mechglue/oid\_ops.c  
lib/gssapi/spnego/gssapiP\_spnego.h  
lib/gssapi/spnego/spnego\_mech.c

and the initial implementation of incremental propagation, including the following new or changed files:

include/iprop\_hdr.h  
kadmin/server/ipropd\_svc.c  
lib/kdb/iprop.x  
lib/kdb/kdb\_convert.c  
lib/kdb/kdb\_log.c  
lib/kdb/kdb\_log.h  
lib/krb5/error\_tables/kdb5\_err.et  
slave/kpropd\_rpc.c  
slave/kproplog.c

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# 1.40 jcmtturner-rpc 2.0.3

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- \* /opt/cola/permits/1212966988\_1633989798.74/0/cas-client-support-saml-3-4-1-sources-

jar/org/jasig/cas/client/validation/Saml11TicketValidationFilter.java  
\*  
/opt/cola/permits/1212966988\_1633989798.74/0/cas-client-support-saml-3-4-1-sources-  
jar/org/jasig/cas/client/util/SamlUtils.java  
\* /opt/cola/permits/1212966988\_1633989798.74/0/cas-client-support-saml-3-4-1-sources-  
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# 1.52 pretty 1.2.0

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## 1.56 golang-snappy 0.0.4

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# 1.59 sqlx 1.3.4

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## 1.61 prometheus-common 0.32.1

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## 1.62 alpine-keys 2.4-r1

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## 1.63 lib-pq 1.10.4

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```
//go:build go1.10
// +build go1.10

package pq

import (
    "context"
    "database/sql/driver"
)

// NoticeHandler returns the notice handler on the given connection, if any. A
// runtime panic occurs if c is not a pq connection. This is rarely used
// directly, use ConnectorNoticeHandler and ConnectorWithNoticeHandler instead.
func NoticeHandler(c driver.Conn) func(*Error) {
    return c.(*conn).noticeHandler
}

// SetNoticeHandler sets the given notice handler on the given connection. A
// runtime panic occurs if c is not a pq connection. A nil handler may be used
// to unset it. This is rarely used directly, use ConnectorNoticeHandler and
// ConnectorWithNoticeHandler instead.
//
// Note: Notice handlers are executed synchronously by pq meaning commands
// won't continue to be processed until the handler returns.
func SetNoticeHandler(c driver.Conn, handler func(*Error)) {
    c.(*conn).noticeHandler = handler
}

// NoticeHandlerConnector wraps a regular connector and sets a notice handler
```



```

//
on it.
type NoticeHandlerConnector struct {
    driver.Connector
    noticeHandler func(*Error)
}

// Connect calls the underlying connector's connect method and then sets the
// notice handler.
func (n *NoticeHandlerConnector) Connect(ctx context.Context) (driver.Conn, error) {
    c, err := n.Connector.Connect(ctx)
    if err == nil {
        SetNoticeHandler(c, n.noticeHandler)
    }
    return c, err
}

// ConnectorNoticeHandler returns the currently set notice handler, if any. If
// the given connector is not a result of ConnectorWithNoticeHandler, nil is
// returned.
func ConnectorNoticeHandler(c driver.Connector) func(*Error) {
    if c, ok := c.(*NoticeHandlerConnector); ok {
        return c.noticeHandler
    }
    return nil
}

// ConnectorWithNoticeHandler creates or sets the given handler for the given
// connector. If the given connector is a result of calling this function
// previously, it is simply set on the given connector and returned. Otherwise,
// this returns a new connector wrapping the given one and
// setting the notice
// handler. A nil notice handler may be used to unset it.
//
// The returned connector is intended to be used with database/sql.OpenDB.
//
// Note: Notice handlers are executed synchronously by pq meaning commands
// won't continue to be processed until the handler returns.
func ConnectorWithNoticeHandler(c driver.Connector, handler func(*Error)) *NoticeHandlerConnector {
    if c, ok := c.(*NoticeHandlerConnector); ok {
        c.noticeHandler = handler
        return c
    }
    return &NoticeHandlerConnector{Connector: c, noticeHandler: handler}
}

```

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\* /opt/cola/permits/1326307438\_1652390603.4675238/0/pippo-metrics-influxdb-1-8-0-sources-jar/ro/pippo/influxdb/Reporter.java

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# 1.82 gorm-io/gorm 1.23.5

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## 1.83 driver-postgres 1.3.5

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```
//go:build go1.10
// +build go1.10

package pq

import (
    "context"
    "database/sql/driver"
)

// NoticeHandler returns the notice handler on the given connection, if any. A
// runtime panic occurs if c is not a pq connection. This is rarely used
// directly, use ConnectorNoticeHandler and ConnectorWithNoticeHandler instead.
func NoticeHandler(c driver.Conn) func(*Error) {
    return c.(*conn).noticeHandler
}

// SetNoticeHandler sets the given notice handler on the given connection. A
// runtime panic occurs if c is not a pq connection. A nil handler may be used
// to unset it. This is rarely used directly, use ConnectorNoticeHandler and
// ConnectorWithNoticeHandler instead.
//
// Note: Notice handlers are executed synchronously by pq meaning commands
// won't continue to be processed until the handler returns.
func SetNoticeHandler(c driver.Conn, handler func(*Error)) {
    c.(*conn).noticeHandler = handler
}
```



```

// NoticeHandlerConnector wraps a regular connector and sets a notice handler
//
// on it.
type NoticeHandlerConnector struct {
    driver.Connector
    noticeHandler func(*Error)
}

// Connect calls the underlying connector's connect method and then sets the
// notice handler.
func (n *NoticeHandlerConnector) Connect(ctx context.Context) (driver.Conn, error) {
    c, err := n.Connector.Connect(ctx)
    if err == nil {
        SetNoticeHandler(c, n.noticeHandler)
    }
    return c, err
}

// ConnectorNoticeHandler returns the currently set notice handler, if any. If
// the given connector is not a result of ConnectorWithNoticeHandler, nil is
// returned.
func ConnectorNoticeHandler(c driver.Connector) func(*Error) {
    if c, ok := c.(*NoticeHandlerConnector); ok {
        return c.noticeHandler
    }
    return nil
}

// ConnectorWithNoticeHandler creates or sets the given handler for the given
// connector. If the given connector is a result of calling this function
// previously, it is simply set on the given connector and returned. Otherwise,
// this returns a new connector wrapping the given one and
// setting the notice
// handler. A nil notice handler may be used to unset it.
//
// The returned connector is intended to be used with database/sql.OpenDB.
//
// Note: Notice handlers are executed synchronously by pq meaning commands
// won't continue to be processed until the handler returns.
func ConnectorWithNoticeHandler(c driver.Connector, handler func(*Error)) *NoticeHandlerConnector {
    if c, ok := c.(*NoticeHandlerConnector); ok {
        c.noticeHandler = handler
        return c
    }
    return &NoticeHandlerConnector{Connector: c, noticeHandler: handler}
}

```

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## 1.84 python-certifi 2021.05.30

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This package contains a modified version of ca-bundle.crt:

ca-bundle.crt -- Bundle of CA Root Certificates

Certificate data from Mozilla as of: Thu Nov 3 19:04:19 2011#

This is a bundle of X.509 certificates of public Certificate Authorities (CA). These were automatically extracted from Mozilla's root certificates file (certdata.txt). This file can be found in the mozilla source tree:

<http://mxr.mozilla.org/mozilla/source/security/nss/lib/ckfw/builtins/certdata.txt?raw=1#>

It contains the certificates in PEM format and therefore can be directly used with curl / libcurl / php\_curl, or with an Apache+mod\_ssl webserver for SSL client authentication. Just configure this file as the SSLCACertificateFile.#

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@(#) \$RCSfile: certdata.txt,v \$

\$Revision: 1.80 \$ \$Date: 2011/11/03 15:11:58 \$

# 1.85 prometheus-common 0.37.0

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# 1.86 jcmtturner-gofork 1.7.6

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## 1.87 prometheus-procfs 0.8.0

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procfs provides functions to retrieve system, kernel and process metrics from the pseudo-filesystem proc.

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```
***** */
```

Found in path(s):

```
* /opt/cola/permits/1401487065_1661623039.6387527/0/react-my-test-package-1-0-0-tgz/package/dist/index.js
```

```
*
```

```
/opt/cola/permits/1401487065_1661623039.6387527/0/react-my-test-package-1-0-0-tgz/package/dist/index.es.js
```

## 1.90 defusedxml 0.7.1

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# 1.101 antlr-antlr4-runtime-go-antlr 1.4.10

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# 1.104 profile 1.7.0

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## 1.105 gogo-protobuf 1.3.2

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## 1.107 mpdecimal 2.5.1-r2

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```
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```

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```
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it  
under certain conditions; type `show c' for details.
```

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```
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```



<signature of Ty Coon>, 1 April 1989

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## 1.115 libucontext 1.2-r2

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## 1.116 chardet 5.1.0

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## 1.117 lib-pq 1.10.9

### 1.117.1 Available under license :

```
//go:build go1.10
// +build go1.10
```

```
package pq
```

```
import (
    "context"
    "database/sql/driver"
)
```

```
// NoticeHandler returns the notice handler on the given connection, if any. A
// runtime panic occurs if c is not a pq connection. This is rarely used
// directly, use ConnectorNoticeHandler and ConnectorWithNoticeHandler instead.
func NoticeHandler(c driver.Conn) func(*Error) {
```

```

return c.(*conn).noticeHandler
}

// SetNoticeHandler sets the given notice handler on the given connection. A
// runtime panic occurs if c is not a pq connection. A nil handler may be used
// to unset it. This is rarely used directly, use ConnectorNoticeHandler and
// ConnectorWithNoticeHandler instead.
//
// Note: Notice handlers are executed synchronously by pq meaning commands
// won't continue to be processed until the handler returns.
func SetNoticeHandler(c driver.Conn, handler func(*Error)) {
    c.(*conn).noticeHandler = handler
}

// NoticeHandlerConnector wraps a regular connector and sets a notice handler
//
// on it.
type NoticeHandlerConnector struct {
    driver.Connector
    noticeHandler func(*Error)
}

// Connect calls the underlying connector's connect method and then sets the
// notice handler.
func (n *NoticeHandlerConnector) Connect(ctx context.Context) (driver.Conn, error) {
    c, err := n.Connector.Connect(ctx)
    if err == nil {
        SetNoticeHandler(c, n.noticeHandler)
    }
    return c, err
}

// ConnectorNoticeHandler returns the currently set notice handler, if any. If
// the given connector is not a result of ConnectorWithNoticeHandler, nil is
// returned.
func ConnectorNoticeHandler(c driver.Connector) func(*Error) {
    if c, ok := c.(*NoticeHandlerConnector); ok {
        return c.noticeHandler
    }
    return nil
}

// ConnectorWithNoticeHandler creates or sets the given handler for the given
// connector. If the given connector is a result of calling this function
// previously, it is simply set on the given connector and returned. Otherwise,
// this returns a new connector wrapping the given one and
// setting the notice
// handler. A nil notice handler may be used to unset it.

```

```
//
// The returned connector is intended to be used with database/sql.OpenDB.
//
// Note: Notice handlers are executed synchronously by pq meaning commands
// won't continue to be processed until the handler returns.
func ConnectorWithNoticeHandler(c driver.Connector, handler func(*Error)) *NoticeHandlerConnector {
    if c, ok := c.(*NoticeHandlerConnector); ok {
        c.noticeHandler = handler
        return c
    }
    return &NoticeHandlerConnector{Connector: c, noticeHandler: handler}
}
```

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## 1.118 wget 1.21.4-r0

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Julian Seward, [jseward@acm.org](mailto:jseward@acm.org)  
bzip2/libbzip2 version 1.0.8 of 13 July 2019

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## 1.121 libunistring 1.1-r2

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## 1.123 musl-obstack 1.2.3-r2

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\* @(#)queue.h 8.5 (Berkeley) 8/20/94

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\* /opt/cola/permits/1686513755\_1685082238.691036/0/aports-master-main-libc-dev-zip/aports-master-main-libc-dev/main/libc-dev/sys-queue.h

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## 1.126 acl 2.3.1-r4

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Both were inspired by Twisted

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That's all there is to it!

# 1.129 iputils-ping 20221126-r2

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```
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    "bytes"
    "flag"
    "fmt"
    "io"
    "log"
    "os"
    "path/filepath"
    "strings"
)
```

```
const crUsageString = `xb copyright [options] <path>...
```

The xb copyright command adds a copyright remark to all go files below path.

```
-h prints this message and exits
```

```
func crUsage(w io.Writer) {
    fmt.Fprint(w, crUsageString)
}
```

```
const copyrightText = `
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license that can be found in the LICENSE file.
```

```
func goComment(text string) string {
    buf := new(bytes.Buffer)
    scanner := bufio.NewScanner(strings.NewReader(text))
    var err error
    for scanner.Scan() {
        s := strings.TrimSpace(scanner.Text())
        if len(s) == 0 {
            continue
        }
        if _, err = fmt.Fprintln(buf, "///", s); err != nil {
            panic(err)
        }
    }
    if err
    = scanner.Err(); err != nil {
        panic(err)
    }
    if _, err = fmt.Fprintln(buf); err != nil {
```

```

    panic(err)
}
return buf.String()
}

var goCopyright = goComment(copyrightText)

func addCopyright(path string) (err error) {
    log.Printf("adding copyright to %s", path)
    src, err := os.Open(path)
    if err != nil {
        return err
    }
    defer func() {
        cerr := src.Close()
        if cerr != nil && err == nil {
            err = cerr
        }
    }()
    newPath := path + ".new"
    dst, err := os.Create(newPath)
    if err != nil {
        return err
    }
    defer func() {
        cerr := dst.Close()
        if cerr != nil && err == nil {
            err = cerr
        }
    }()
    out := bufio.NewWriter(dst)
    fmt.Fprint(out, goCopyright)
    scanner := bufio.NewScanner(src)
    line := 0
    del := false
    for scanner.Scan() {
        line++
        txt := scanner.Text()
        if line == 1 && strings.Contains(txt, "Copyright") {
            del = true
            continue
        }
        if del {
            s := strings.TrimSpace(txt)
            if len(s) == 0 {
                del = false
            }
        }
        continue
    }
}

```

```

    }
    fmt.Fprintln(out, txt)
}
if err = scanner.Err();
err != nil {
    return err
}
if err = out.Flush(); err != nil {
    return
}
err = os.Rename(newPath, path)
return
}

func walkCopyrights(path string, info os.FileInfo, err error) error {
    if err != nil {
        return err
    }
    if info.IsDir() {
        return nil
    }
    if !strings.HasSuffix(info.Name(), ".go") {
        return nil
    }
    return addCopyright(path)
}

func copyright() {
    cmdName := os.Args[0]
    log.SetPrefix(fmt.Sprintf("%s: ", cmdName))
    log.SetFlags(0)

    flag.CommandLine = flag.NewFlagSet(cmdName, flag.ExitOnError)
    flag.Usage = func() { crUsage(os.Stderr); os.Exit(1) }

    help := flag.Bool("h", false, "")

    flag.Parse()

    if *help {
        crUsage(os.Stdout)
        os.Exit(0)
    }

    for _, path := range flag.Args() {
        fi, err := os.Stat(path)
        if err != nil {
            log.Print(err)
        }
    }
}

```

```

    continue
}
if !fi.IsDir() {
    log.Printf("%s is not a directory", path)
    continue
}
if err = filepath.Walk(path, walkCopyrights); err != nil {
    log.Fatalf("%s error %s", path, err)
}
}
}
}
package main

```

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## 1.131 tre 0.8.0-r2

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```

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## 1.141 antchfx-xmlquery 1.3.14

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```
<one line to give the program's name and a brief idea of what it does.>  
Copyright (C) <year> <name of author>
```

```
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(at your option) any later version.
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```
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Gnomovision comes with ABSOLUTELY NO WARRANTY; for details type `show w'.  
This is free software, and you are welcome to redistribute  
it  
under certain conditions; type `show c' for details.
```

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```
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'Gnomovision' (which makes passes at compilers) written by James Hacker.
```

```
<signature of Ty Coon>, 1 April 1989
```

Ty Coon, President of Vice

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However, unrestricted linking of non-free programs would deprive the users of those programs of all benefit from the free status of the



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## 1.152 procps 4.0.4-r0

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## 1.153 libidn 2.3.4-r4

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## 1.154 python-setuptools 68.2.2

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In 1995, Guido continued his work on Python at the Corporation for National Research Initiatives (CNRI, see <http://www.cnri.reston.va.us>) in Reston, Virginia where he released several versions of the software.

In May 2000, Guido and the Python core development team moved to BeOpen.com to form the BeOpen PythonLabs team. In October of the same year, the PythonLabs team moved to Digital Creations (now Zope Corporation, see <http://www.zope.com>). In 2001, the Python Software Foundation (PSF, see <http://www.python.org/psf/>) was formed, a non-profit organization created specifically to own Python-related Intellectual Property. Zope Corporation is a sponsoring member of the PSF.

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2.0.1	2.0+1.6.1	2001	PSF	yes
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## 1.155 urllib3 1.26.17

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## 1.157 grpc-gateway 1.16.0

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```
</pre></div><div class="navfooter"><hr><table width="100%" summary="Navigation footer"><tr><td
width="40%" align="left"><a accesskey="p" href="mwg-author.html">Prev</a> </td><td width="20%"
align="center"> </td><td width="40%" align="right"> </td></tr><tr><td width="40%" align="left"
valign="top">Chapter 8. Author/acknowledgments </td><td width="20%" align="center"><a accesskey="h"
href="Linux-PAM_MWG.html">Home</a></td><td width="40%" align="right"
valign="top"> </td></tr></table></div></body></html>
```

Found in path(s):

\* /opt/cola/permits/1822720343\_1704297183.37862/0/linux-pam-1-5-3-docs-tar-xz/Linux-PAM-

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```
<html><head><meta http-equiv="Content-Type" content="text/html; charset=UTF-8"><title>6.36. pam_tty_audit -
enable/disable tty auditing</title><meta name="generator" content="DocBook XSL Stylesheets V1.79.2"><link
rel="home" href="Linux-PAM_SAG.html" title="The Linux-PAM System Administrators' Guide"><link rel="up"
href="sag-module-reference.html" title="Chapter 6. A reference guide for available modules"><link rel="prev"
href="sag-pam_timestamp.html" title="6.35. pam_timestamp - authenticate using cached successful authentication
attempts"><link rel="next" href="sag-pam_umask.html" title="6.37. pam_umask - set the file mode creation
mask"></head><body bgcolor="white" text="black" link="#0000FF" vlink="#840084" alink="#0000FF"><div
class="navheader"><table width="100%" summary="Navigation header"><tr><th colspan="3">
align="center">6.36. pam_tty_audit - enable/disable tty auditing</th></tr><tr><td width="20%" align="left"><a
accesskey="p" href="sag-pam_timestamp.html">Prev</a> </td><th width="60%" align="center">Chapter 6. A
reference guide for available modules</th><td width="20%" align="right"> <a accesskey="n" href="sag-
pam_umask.html">Next</a></td></tr></table><hr/><div class="section"><div
class="titlepage"><div><div><h2 class="title" style="clear: both"><a name="sag-
pam_tty_audit"></a>6.36. pam_tty_audit - enable/disable tty auditing</h2></div></div></div><div
class="cmdsynopsis"><p><code class="command">pam_tty_audit.so</code> [
disable=<em class="replaceable"><code>patterns</code></em>
] [
enable=<em class="replaceable"><code>patterns</code></em>
]</p></div><div class="section"><div class="titlepage"><div><div><h3 class="title"><a name="sag-
pam_tty_audit-description"></a>6.36.1. DESCRIPTION</h3></div></div></div><p>
The pam_tty_audit PAM module is used to enable or disable TTY auditing.
By default, the kernel does not audit input on any TTY.
</p></div><div
class="section"><div class="titlepage"><div><div><h3 class="title"><a name="sag-pam_tty_audit-
options"></a>6.36.2. OPTIONS</h3></div></div></div><div class="variablelist"><dl
class="variablelist"><dt><span class="term">
disable=patterns
</span></dt><dd><p>
For each user matching <code class="option"><em class="replaceable"><code>patterns</code></em></code>,
disable TTY auditing. This overrides any previous <code class="option">enable</code>
option matching the same user name on the command line. See NOTES
for further description of <code class="option"><em class="replaceable"><code>patterns</code></em></code>.
</p></dd><dt><span class="term">
enable=patterns
</span></dt><dd><p>
For each user matching <code class="option"><em class="replaceable"><code>patterns</code></em></code>,
enable TTY auditing. This overrides any previous <code class="option">disable</code>
option matching the same user name on the
command line. See NOTES
for further description of <code class="option"><em class="replaceable"><code>patterns</code></em></code>.
</p></dd><dt><span class="term">
open_only
</span></dt><dd><p>
Set the TTY audit flag when opening the session, but do not restore
it when closing the session. Using this option is necessary for
```

some services that don't `fork()` to run the authenticated session, such as `sudo`.

`log_passwd`

Log keystrokes when ECHO mode is off but ICANON mode is active.

This is the mode in which the tty is placed during password entry.

By default, passwords are not logged. This option may not be available on older kernels (3.9?).

Only the `session` type is supported.

`PAM_SESSION_ERR`

Error reading or modifying the TTY audit flag. See the system log for more details.

Success.

When TTY auditing is enabled, it is inherited by all processes started by that user. In particular, daemons restarted by a user will still have

TTY auditing enabled, and audit TTY input even by other users unless auditing for these users is explicitly disabled. Therefore, it is

recommended to use `disable=*` as the first option for most daemons using PAM.

To view the data that was logged by the kernel to audit use

the command `aureport --tty`.

The `patterns` are comma separated lists of glob patterns or ranges of uids. A range is specified as

`min_uid`:

`max_uid` where

one of these values can be empty. If `min_uid` is

empty only user with the uid `max_uid` will be

matched. If `max_uid` is empty users

with the uid

greater than or equal to `min_uid` will be matched.

Please note that passwords in some circumstances may be logged by TTY auditing

even if the `log_passwd` is not used. For example, all input to

an ssh session will be logged - even if there is a password being typed into

some software running at the remote host because only the local TTY state

affects the local TTY auditing.

</p></div><div class="section"><div class="titlepage"><div><div><h3 class="title"><a name="sag-pam\_tty\_audit-examples"></a>6.36.6. EXAMPLES</h3></div></div></div><p>

Audit all administrative actions.

</p><pre class="programlisting">

```
session required pam_tty_audit.so disable=* enable=root
```

</pre><p>

</p></div><div class="section"><div class="titlepage"><div><div><h3 class="title"><a name="sag-pam\_tty\_audit-author"></a>6.36.7. AUTHOR</h3></div></div></div><p>

pam\_tty\_audit was written by Miloslav Trma

&lt;mitr@redhat.com&gt;.

The log\_passwd option was added by Richard Guy Briggs

&lt;rgb@redhat.com&gt;.

</p></div></div><div class="navfooter"><hr><table width="100%" summary="Navigation footer"><tr><td width="40%" align="left"><a accesskey="p" href="sag-pam\_timestamp.html">Prev</a> </td><td width="20%" align="center"><a accesskey="u" href="sag-module-reference.html">Up</a></td><td width="40%" align="right"> <a accesskey="n" href="sag-pam\_umask.html">Next</a></td></tr><tr><td width="40%" align="left" valign="top">6.35. pam\_timestamp - authenticate using cached successful authentication attempts </td><td width="20%" align="center"><a accesskey="h" href="Linux-PAM\_SAG.html">Home</a></td><td width="40%" align="right" valign="top"> 6.37. pam\_umask - set the file mode creation mask</td></tr></table></div></body></html>

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\* /opt/cola/permits/1822720343\_1704297183.37862/0/linux-pam-1-5-3-docs-tar-xz/Linux-PAM-1.5.3/doc/sag/html/sag-pam\_tty\_audit.html

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The Linux-PAM Module Writers' Guide

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Thorsten Kukuk

<kukuk@thkukuk.de>

Version 1.1.2, 31. August 2010

Abstract

This manual documents what a programmer needs to know in order to write a module that conforms to the Linux-PAM standard. It also discusses some security issues from the point of view of the module programmer.

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## Chapter 1. Introduction

### 1.1. Description

Linux-PAM (Pluggable Authentication Modules for Linux) is a library that enables the local system administrator to choose how individual applications authenticate users. For an overview of the Linux-PAM library see the Linux-PAM System Administrators' Guide.

A Linux-PAM module is a single executable binary file that can be loaded by the Linux-PAM interface library. This PAM library is configured locally with a system file, `/etc/pam.conf`, to authenticate a user request via the locally available authentication modules. The modules themselves will usually be located in the directory `/lib/security` (or `/lib64/security`, depending on the architecture) and take the form of dynamically loadable object files (see `dlopen(3)`). Alternatively, the modules can be statically linked into the Linux-PAM library; this is mostly to allow Linux-PAM to be used on platforms without dynamic linking available, but this is a deprecated functionality. It is the Linux-PAM interface that is called by an application and it is the responsibility of the library to locate, load and call the appropriate functions in a Linux-PAM-module.

Except for the immediate purpose of interacting with the user (entering a password etc..) the module should never call the application directly. This exception requires a "conversation mechanism" which is documented below.



## 1.2. Synopsis

```
#include <security/pam_modules.h>

gcc -fPIC -c pam_module.c
gcc -shared -o pam_module.so pam_module.o -lpam
```

## Chapter 2. What can be expected by the module

Here we list the interface that the conventions that all Linux-PAM modules must adhere to.

### 2.1. Getting and setting PAM\_ITEMS and data

First, we cover what the module should expect from the Linux-PAM library and a Linux-PAM aware application. Essentially this is the libpam.\* library.

#### 2.1.1. Set module internal data

```
#include <security/pam_modules.h>

int pam_set_data pamh,
(
    module_data_name,
    data,
    (*cleanup)(pam_handle_t *pamh, void *data, int
error_status));

pam_handle_t *pamh;
const char *module_data_name;
void *data;
void (*cleanup)(pam_handle_t *pamh, void *data, int error_status);
```

##### 2.1.1.1. DESCRIPTION

The pam\_set\_data function associates a pointer to an object with the (hopefully) unique string module\_data\_name in the PAM context specified by the pamh argument.

PAM modules may be dynamically loadable objects. In general such files should not contain static variables. This function and its counterpart pam\_get\_data(3) , provide a mechanism for a module to associate some data with the handle pamh. Typically a module will call the pam\_set\_data function to register some data under a (hopefully) unique module\_data\_name. The data is available for use by

other modules too but not by an application. Since this function stores only a pointer to the data, the module should not modify or free the content of it.

The function `cleanup()` is associated with the data and, if non-NULL, it is called when this data is over-written or following a call to `pam_end(3)`.

The `error_status` argument is used to indicate to the module the sort of action it is to take in cleaning this data item. As an example, Kerberos creates a ticket file during the authentication phase, this file might be associated with a data item. When `pam_end(3)` is called by the module, the `error_status` carries the return value of the `pam_authenticate(3)` or other libpam function as appropriate. Based on this value the Kerberos module may choose to delete the ticket file (authentication failure) or leave it in place.

The `error_status` may have been logically OR'd with either of the following two values:

#### PAM\_DATA\_REPLACE

When a data item is being replaced (through a second call to `pam_set_data`) this mask is used. Otherwise, the call is assumed to be from `pam_end(3)`.

#### PAM\_DATA\_SILENT

Which indicates that the process would prefer to perform the `cleanup()` quietly. That is, discourages logging/messages to the user. It is generally used to indicate that the current closing of the library is in a fork(2)ed process, and that the parent will take care of cleaning up things that exist outside of the current process space (files etc.).

### 2.1.1.2. RETURN VALUES

#### PAM\_BUF\_ERR

Memory buffer error.

#### PAM\_SUCCESS

Data was successfully stored.

#### PAM\_SYSTEM\_ERR

A NULL pointer was submitted as PAM handle or the function was called by an application.

### 2.1.2. Get module internal data

```
#include <security/pam_modules.h>
```

```
int
```

```
    pam_get_data( pamh,  
                 module_data_name,  
                 data);
```

```
const pam_handle_t *pamh;  
const char *module_data_name;  
const void **data;
```

#### 2.1.2.1. DESCRIPTION

This function together with the `pam_set_data(3)` function is useful to manage module-specific data meaningful only to the calling PAM module.

The `pam_get_data` function looks up the object associated with the (hopefully) unique string `module_data_name` in the PAM context specified by the `pamh` argument. A successful call to `pam_get_data` will result in `data` pointing to the object. Note, this data is not a copy and should be treated as constant by the module.

#### 2.1.2.2. RETURN VALUES

##### PAM\_SUCCESS

Data was successfully retrieved.

##### PAM\_SYSTEM\_ERR

A NULL pointer was submitted as PAM handle or the function was called by an application.

##### PAM\_NO\_MODULE\_DATA

Module data not found or there is an entry, but it has the value NULL.

#### 2.1.3. Setting PAM items

```
#include  
<security/pam_modules.h>
```

```
int pam_set_item( pamh,  
                 item_type,  
                 item);
```

```
pam_handle_t *pamh;
```

```
int item_type;
const void *item;
```

#### 2.1.3.1. DESCRIPTION

The `pam_set_item` function allows applications and PAM service modules to access and to update PAM information of `item_type`. For this a copy of the object pointed to by the `item` argument is created. The following `item_types` are supported:

##### PAM\_SERVICE

The service name (which identifies that PAM stack that the PAM functions will use to authenticate the program).

##### PAM\_USER

The username of the entity under whose identity service will be given. That is, following authentication, `PAM_USER` identifies the local entity that gets to use the service. Note, this value can be mapped from something (eg., "anonymous") to something else (eg. "guest119") by any module in the PAM stack. As such an application should consult the value of `PAM_USER` after each call to a PAM function.

##### PAM\_USER\_PROMPT

The string used when prompting for a user's name. The default value for this string is a localized version of "login: ".

##### PAM\_TTY

The terminal name prefixed by `/dev/` for device files. In the past, graphical X-based applications used to store the `$DISPLAY` variable here, but with the introduction of `PAM_XDISPLAY` this usage is deprecated.

##### PAM\_RUSER

The requesting user name: local name for a locally requesting user or a remote user name for a remote requesting user.

Generally an application or module will attempt to supply the value that is most strongly authenticated (a local account before a remote one. The level of trust in this value is embodied in the actual authentication stack associated with the application, so it is ultimately at the discretion of the system administrator.

PAM\_RUSER@PAM\_RHOST should always identify the requesting user. In some cases, PAM\_RUSER may be NULL. In such situations, it is unclear who the requesting entity is.

#### PAM\_RHOST

The requesting hostname (the hostname of the machine from which the PAM\_RUSER entity is requesting service). That is PAM\_RUSER@PAM\_RHOST does identify the requesting user. In some applications, PAM\_RHOST may be NULL. In such situations, it is unclear where the authentication request is originating from.

#### PAM\_AUTHTOK

The authentication token (often a password). This token should be ignored by all module functions besides pam\_sm\_authenticate(3) and pam\_sm\_chauthtok(3). In the former function it is used to pass the most recent authentication token from one stacked module to another. In the latter function the token is used for another purpose. It contains the currently active authentication token.

#### PAM\_OLDAUTHTOK

The old authentication token. This token should be ignored by all module functions except pam\_sm\_chauthtok(3).

#### PAM\_CONV

The pam\_conv structure. See pam\_conv(3).

The following additional items are specific to Linux-PAM and should not be used in portable applications:

#### PAM\_FAIL\_DELAY

A function pointer to redirect centrally managed failure delays. See pam\_fail\_delay(3).

#### PAM\_XDISPLAY

The name of the X display. For graphical, X-based applications the value for this item should be the \$DISPLAY variable. This value may be used independently of PAM\_TTY for passing the name of the display.

#### PAM\_XAUTHDATA

A pointer to a structure containing the X authentication data required to make a connection to the display specified by PAM\_XDISPLAY, if such information is necessary. See pam\_xauth\_data(3).

## PAM\_AUTHTOK\_TYPE

The default action is for the module to use the following prompts when requesting passwords: "New UNIX password: " and "Retype UNIX password: ". The example word UNIX can be replaced with this item, by default it is empty. This item is used by pam\_get\_authtok(3).

For all item\_types, other than PAM\_CONV and PAM\_FAIL\_DELAY, item is a pointer to a <NUL> terminated character string. In the case of PAM\_CONV, item points to an initialized pam\_conv structure. In the case of PAM\_FAIL\_DELAY, item is a function pointer: void (\*delay\_fn)(int retval, unsigned usec\_delay, void \*appdata\_ptr)

Both, PAM\_AUTHTOK and PAM\_OLDAUTHTOK, will be reset before returning to the application. Which means an application is not able to access the authentication tokens.

### 2.1.3.2. RETURN VALUES

#### PAM\_BAD\_ITEM

The application attempted to set an undefined or inaccessible item.

#### PAM\_BUF\_ERR

Memory buffer error.

#### PAM\_SUCCESS

Data was successful updated.

#### PAM\_SYSTEM\_ERR

The pam\_handle\_t passed as first argument was invalid.

### 2.1.4. Getting PAM items

```
#include <security/pam_modules.h>
```

```
int pam_get_item( pamh,  
                 item_type,  
                 item);
```

```
const pam_handle_t *pamh;
int item_type;
const void **item;
```

#### 2.1.4.1. DESCRIPTION

The `pam_get_item`

function allows applications and PAM service modules to access and retrieve PAM information of `item_type`. Upon successful return, `item` contains a pointer to the value of the corresponding item. Note, this is a pointer to the actual data and should not be `free()`'ed or over-written! The following values are supported for `item_type`:

##### PAM\_SERVICE

The service name (which identifies that PAM stack that the PAM functions will use to authenticate the program).

##### PAM\_USER

The username of the entity under whose identity service will be given. That is, following authentication, `PAM_USER` identifies the local entity that gets to use the service. Note, this value can be mapped from something (eg., "anonymous") to something else (eg. "guest119") by any module in the PAM stack. As such an application should consult the value of `PAM_USER` after each call to a PAM function.

##### PAM\_USER\_PROMPT

The string used when prompting for a user's name. The default value for this string is a localized version of "login: ".

##### PAM\_TTY

The terminal name prefixed by `/dev/` for device files. In the past, graphical X-based applications used to store the `$DISPLAY` variable here, but with the introduction of `PAM_XDISPLAY` this usage is deprecated.

##### PAM\_RUSER

The requesting user name: local name for a locally requesting user or a remote user name for a remote requesting user.

Generally an application or module will attempt to supply the value that is most strongly authenticated (a local account before a remote one. The level of trust in this value is embodied in the actual authentication stack associated with the application, so it is ultimately at the discretion of

the system administrator.

PAM\_RUSER@PAM\_RHOST should always identify the requesting user. In some cases, PAM\_RUSER may be NULL. In such situations, it is unclear who the requesting entity is.

#### PAM\_RHOST

The requesting hostname (the hostname of the machine from which the PAM\_RUSER entity is requesting service). That is PAM\_RUSER@PAM\_RHOST does identify the requesting user. In some applications, PAM\_RHOST may be NULL. In such situations, it is unclear where the authentication request is originating from.

#### PAM\_AUTHTOK

The authentication token (often a password). This token should be ignored by all module functions besides pam\_sm\_authenticate(3) and pam\_sm\_chauthtok(3). In the former function it is used to pass the most recent authentication token from one stacked module to another. In the latter function the token is used for another purpose. It contains the currently active authentication token.

#### PAM\_OLDAUTHTOK

The old authentication token. This token should be ignored by all module functions except pam\_sm\_chauthtok(3).

#### PAM\_CONV

The pam\_conv structure. See pam\_conv(3).

The following additional items are specific to Linux-PAM and should not be used in portable applications:

#### PAM\_FAIL\_DELAY

A function pointer to redirect centrally managed failure delays. See pam\_fail\_delay(3).

#### PAM\_XDISPLAY

The name of the X display. For graphical, X-based applications the value for this item should be the \$DISPLAY variable. This value may be used independently of PAM\_TTY for passing the name of the display.

#### PAM\_XAUTHDATA



A pointer to a structure containing the X authentication data required to make a connection to the display specified by PAM\_XDISPLAY, if such information is necessary. See pam\_xauth\_data(3).

## PAM\_AUTHTOK\_TYPE

The default action is for the module to use the following prompts when requesting passwords: "New UNIX password: " and "Retype UNIX password: ". The example word UNIX can be replaced with this item, by default it is empty. This item is used by pam\_get\_authtok(3).

If a service module wishes to obtain the name of the user, it should not use this function, but instead perform a call to pam\_get\_user(3).

Only

a service module is privileged to read the authentication tokens, PAM\_AUTHTOK and PAM\_OLDAUTHTOK.

### 2.1.4.2. RETURN VALUES

#### PAM\_BAD\_ITEM

The application attempted to set an undefined or inaccessible item.

#### PAM\_BUF\_ERR

Memory buffer error.

#### PAM\_PERM\_DENIED

The value of item was NULL.

#### PAM\_SUCCESS

Data was successful updated.

#### PAM\_SYSTEM\_ERR

The pam\_handle\_t passed as first argument was invalid.

### 2.1.5. Get user name

```
#include <security/pam_modules.h>
```

```
int pam_get_user( pamh,  
                 user,  
                 prompt);
```

```
const pam_handle_t *pamh;
const char **user;
const char *prompt;
```

#### 2.1.5.1. DESCRIPTION

The `pam_get_user` function returns the name of the user specified by `pam_start(3)`. If no user was specified it returns what `pam_get_item(pamh, PAM_USER, ...)` would have returned. If this is `NULL` it obtains the username via the `pam_conv(3)` mechanism, it prompts the user with the first non-`NULL` string in the following list:

- The prompt argument passed to the function.
- What is returned by `pam_get_item(pamh, PAM_USER_PROMPT, ...)`;
- The default prompt: "login: "

By whatever means the username is obtained, a pointer to it is returned as the contents of `*user`. Note, this memory should not be `free()`'d or modified by the module.

This function sets the `PAM_USER` item associated with the `pam_set_item(3)` and `pam_get_item(3)` functions.

#### 2.1.5.2. RETURN VALUES

##### PAM\_SUCCESS

User name was successful retrieved.

##### PAM\_SYSTEM\_ERR

A `NULL` pointer was submitted.

##### PAM\_CONV\_ERR

The conversation method supplied by the application failed to obtain the username.

##### PAM\_BUF\_ERR

Memory buffer error.

##### PAM\_ABORT

Error resuming an old conversation.

## PAM\_CONV\_AGAIN

The conversation method supplied by the application is waiting for an event.

### 2.1.6. The conversation function

```
#include <security/pam_appl.h>

struct pam_message {
    int msg_style;
    const char *msg;
};

struct
pam_response {
    char *resp;
    int resp_retcode;
};

struct pam_conv {
    int (*conv)(int num_msg, const struct pam_message **msg,
                struct pam_response **resp, void *appdata_ptr);
    void *appdata_ptr;
};
```

#### 2.1.6.1. DESCRIPTION

The PAM library uses an application-defined callback to allow a direct communication between a loaded module and the application. This callback is specified by the struct `pam_conv` passed to `pam_start(3)` at the start of the transaction.

When a module calls the referenced `conv()` function, the argument `appdata_ptr` is set to the second element of this structure.

The other arguments of a call to `conv()` concern the information exchanged by module and application. That is to say, `num_msg` holds the length of the array of pointers, `msg`. After a successful return, the pointer `resp` points to an array of `pam_response` structures, holding the application supplied text. The `resp_retcode` member of this struct is unused and should be set to zero. It is the caller's responsibility to release both, this array and the responses themselves, using `free(3)`. Note, `*resp` is a struct `pam_response` array and not

an array of pointers.

The number of responses is always equal to the `num_msg` conversation function argument. This does require that the response array is `free(3)`'d after every call to the conversation function. The index of the responses corresponds directly to the prompt index in the `pam_message` array.

On failure, the conversation function should release any resources it has allocated, and return one of the predefined PAM error codes.

Each message can have one of four types, specified by the `msg_style` member of struct `pam_message`:

#### PAM\_PROMPT\_ECHO\_OFF

Obtain a string without echoing any text.

#### PAM\_PROMPT\_ECHO\_ON

Obtain a string whilst echoing text.

#### PAM\_ERROR\_MSG

Display an error message.

#### PAM\_TEXT\_INFO

Display some text.

The point of having an array of messages is that it becomes possible to pass a number of things to the application in a single call from the module. It can also be convenient for the application that related things come at once: a windows based application can then present a single form with many messages/prompts on at once.

In passing, it is worth noting that there is a discrepancy between the way Linux-PAM handles the `const struct pam_message **msg` conversation function argument and the way that Solaris' PAM (and derivatives, known to include HP/UX, are there others?) does. Linux-PAM interprets the `msg` argument as entirely equivalent to the following prototype `const struct pam_message *msg[]` (which, in spirit, is consistent with the commonly used prototypes for `argv` argument to the familiar `main()` function: `char **argv`; and `char *argv[]`). Said another way Linux-PAM interprets the `msg` argument as a pointer to an array of `num_msg` read only 'struct `pam_message`' pointers. Solaris' PAM implementation interprets this argument as a pointer to a pointer to an array of `num_msg` `pam_message` structures.

Fortunately, perhaps, for most module/application developers when num\_msg has a value of one these two definitions are entirely equivalent. Unfortunately, casually raising this number to two has led to unanticipated compatibility problems.

For what its worth the two known module writer work-arounds for trying to maintain source level compatibility with both PAM implementations are:

- never call the conversation function with num\_msg greater than one.
- set up msg as doubly referenced so both types of conversation function can find the messages. That is, make

```
msg[n] = & (( *msg )[n])
```

#### 2.1.6.2. RETURN VALUES

##### PAM\_BUF\_ERR

Memory buffer error.

##### PAM\_CONV\_ERR

Conversation failure. The application should not set \*resp.

##### PAM\_SUCCESS

Success.

#### 2.1.7. Set or change PAM environment variable

```
#include <security/pam_appl.h>
```

```
int pam_putenv( pamh,  
               name_value);
```

```
pam_handle_t *pamh;  
const char *name_value;
```

##### 2.1.7.1.

###### DESCRIPTION

The pam\_putenv function is used to add or change the value of PAM environment variables as associated with the pamh handle.

The pamh argument is an authentication handle obtained by a prior call to

pam\_start(). The name\_value argument is a single NUL terminated string of one of the following forms:

NAME=value of variable

In this case the environment variable of the given NAME is set to the indicated value: value of variable. If this variable is already known, it is overwritten. Otherwise it is added to the PAM environment.

NAME=

This function sets the variable to an empty value. It is listed separately to indicate that this is the correct way to achieve such a setting.

NAME

Without an '=' the pam\_putenv() function will delete the corresponding variable from the PAM environment.

pam\_putenv() operates on a copy of name\_value, which means in contrast to putenv(3), the application is responsible for freeing the data.

#### 2.1.7.2. RETURN VALUES

PAM\_PERM\_DENIED

Argument name\_value given is a NULL pointer.

PAM\_BAD\_ITEM

Variable requested (for deletion) is not currently set.

PAM\_ABORT

The pamh handle is corrupt.

PAM\_BUF\_ERR

Memory buffer error.

PAM\_SUCCESS

The environment variable was successfully updated.

#### 2.1.8. Get a PAM environment variable

```
#include <security/pam_appl.h>
```

```
const char *pam_getenv( pamh,  
                        name);  
  
pam_handle_t *pamh;  
const char *name;
```

#### 2.1.8.1. DESCRIPTION

The `pam_getenv` function searches the PAM environment list as associated with the handle `pamh` for an item that matches the string pointed to by `name` and returns a pointer to the value of the environment variable. The application is not allowed to free the data.

#### 2.1.8.2. RETURN VALUES

The `pam_getenv` function returns `NULL` on failure.

#### 2.1.9. Getting the PAM environment

```
#include <security/pam_appl.h>  
  
char **pam_getenvlist( pamh);  
  
pam_handle_t *pamh;
```

#### 2.1.9.1. DESCRIPTION

The `pam_getenvlist` function returns a complete copy of the PAM environment as associated with the handle `pamh`. The PAM environment variables represent the contents of the regular environment variables of the authenticated user when service is granted.

The format of the memory is a `malloc()`'d array of char pointers, the last element of which is set to `NULL`. Each of the non-`NULL` entries in this array point to a NUL terminated and `malloc()`'d char string of the form: "name=value".

It should be noted that this memory will never be `free()`'d by `libpam`. Once obtained by a call to `pam_getenvlist`, it is the responsibility of the calling application to `free()` this memory.

It is by design, and not a coincidence, that the format and contents of the returned array matches that required for the third argument of the `execle(3)` function call.

### 2.1.9.2. RETURN VALUES

The pam\_getenvlist function returns NULL on failure.

## 2.2. Other functions provided by libpam

### 2.2.1. Strings describing PAM error codes

```
#include
<security/pam_appl.h>

const char *pam_strerror( pamh,
                          errnum);

pam_handle_t *pamh;
int errnum;
```

#### 2.2.1.1. DESCRIPTION

The pam\_strerror function returns a pointer to a string describing the error code passed in the argument errnum, possibly using the LC\_MESSAGES part of the current locale to select the appropriate language. This string must not be modified by the application. No library function will modify this string.

#### 2.2.1.2. RETURN VALUES

This function returns always a pointer to a string.

### 2.2.2. Request a delay on failure

```
#include <security/pam_appl.h>

int pam_fail_delay( pamh,
                   usec);

pam_handle_t *pamh;
unsigned int usec;
```

#### 2.2.2.1. DESCRIPTION

The pam\_fail\_delay function provides a mechanism by which an application or module can suggest a minimum delay of usec micro-seconds. The function keeps a record of the longest time requested with this function. Should pam\_authenticate(3) fail, the failing return to the application is delayed by an amount of time randomly distributed (by up to 50%) about this longest value.



Independent of success, the delay time is reset to its zero default value when the PAM service module returns control to the application. The delay occurs after all authentication modules have been called, but before control is returned to the service application.

When using this function the programmer should check if it is available with:

```
#ifdef HAVE_PAM_FAIL_DELAY
...
#endif /* HAVE_PAM_FAIL_DELAY */
```

For applications written with a single thread that are event driven in nature, generating this delay may be undesirable. Instead, the application may want to register the delay in some other way. For example, in a single threaded server that serves multiple authentication requests from a single event loop, the application might want to simply mark a given connection as blocked until an application timer expires. For this reason the delay function can be changed with the

PAM\_FAIL\_DELAY item. It can be queried and set with `pam_get_item(3)` and `pam_set_item(3)` respectively. The value used to set it should be a function pointer of the following prototype:

```
void (*delay_fn)(int retval, unsigned usec_delay, void *appdata_ptr);
```

The arguments being the `retval` return code of the module stack, the `usec_delay` micro-second delay that `libpam` is requesting and the `appdata_ptr` that the application has associated with the current `pamh`. This last value was set by the application when it called `pam_start(3)` or explicitly with `pam_set_item(3)`.

Note that the PAM\_FAIL\_DELAY item is set to NULL by default. This indicates that PAM should perform a random delay as described above when authentication fails and a delay has been suggested. If an application does not want the PAM library to perform any delay on authentication failure, then the application must define a custom delay function that executes no statements and set the PAM\_FAIL\_DELAY item to point to this function.

#### 2.2.2.2.

##### RETURN VALUES

##### PAM\_SUCCESS

Delay was successful adjusted.

##### PAM\_SYSTEM\_ERR

A NULL pointer was submitted as PAM handle.

### Chapter 3. What is expected of a module

The module must supply a sub-set of the six functions listed below. Together they define the function of a Linux-PAM module. Module developers are strongly urged to read the comments on security that follow this list.

#### 3.1. Overview

The six module functions are grouped into four independent management groups. These groups are as follows: authentication, account, session and password. To be properly defined, a module must define all functions within at least one of these groups. A single module may contain the necessary functions for all four groups.

##### 3.1.1. Functional independence

The independence of the four groups of service a module can offer means that the module should allow for the possibility that any one of these four services may legitimately be called in any order. Thus, the module writer should consider

the appropriateness of performing a service without the prior success of some other part of the module.

As an informative example, consider the possibility that an application applies to change a user's authentication token, without having first requested that Linux-PAM authenticate the user. In some cases this may be deemed appropriate: when root wants to change the authentication token of some lesser user. In other cases it may not be appropriate: when joe maliciously wants to reset alice's password; or when anyone other than the user themselves wishes to reset their KERBEROS authentication token. A policy for this action should be defined by any reasonable authentication scheme, the module writer should consider this when implementing a given module.

##### 3.1.2. Minimizing administration problems

To avoid system administration problems and the poor construction of a `/etc/pam.conf` file, the module developer may define all six of the following functions. For those functions that

would not be called, the module should return `PAM_SERVICE_ERR` and write an appropriate message to the system log. When this action is deemed inappropriate, the function would simply return `PAM_IGNORE`.

##### 3.1.3. Arguments supplied to the module

The flags argument of each of the following functions can be logically OR'd

with PAM\_SILENT, which is used to inform the module to not pass any text (errors or warnings) application.

The argc and argv arguments are taken from the line appropriate to this module---that is, with the service\_name matching that of the application---in the configuration file (see the Linux-PAM System Administrators' Guide). Together these two parameters provide the number of arguments and an array of pointers to the individual argument tokens. This will be familiar to C programmers as the ubiquitous method of passing command arguments to the function main(). Note, however, that the first argument (argv[0]) is a true argument and not the name of the module.

## 3.2.

### Authentication management

#### 3.2.1. Service function for user authentication

```
#include <security/pam_modules.h>
```

```
int pam_sm_authenticate( pamh,  
                        flags,  
                        argc,  
                        argv);
```

```
pam_handle_t *pamh;  
int flags;  
int argc;  
const char **argv;
```

##### 3.2.1.1. DESCRIPTION

The pam\_sm\_authenticate function is the service module's implementation of the pam\_authenticate(3) interface.

This function performs the task of authenticating the user.

Valid flags, which may be logically OR'd with PAM\_SILENT, are:

#### PAM\_SILENT

Do not emit any messages.

#### PAM\_DISALLOW\_NULL\_AUTHTOK

Return PAM\_AUTH\_ERR if the database of authentication tokens for this authentication mechanism has a NULL entry for the user. Without this flag, such a NULL token will lead to a success without the user being prompted.

### 3.2.1.2. RETURN VALUES

#### PAM\_AUTH\_ERR

Authentication failure.

#### PAM\_CRED\_INSUFFICIENT

For some reason the application does not have sufficient credentials to authenticate the user.

#### PAM\_AUTHINFO\_UNAVAIL

The modules were not able to access the authentication information. This might be due to a network or hardware failure etc.

#### PAM\_SUCCESS

The authentication token was successfully updated.

#### PAM\_USER\_UNKNOWN

The supplied username is not known to the authentication service.

#### PAM\_MAXTRIES

One or more of the authentication modules has reached its limit of tries authenticating the user. Do not try again.

### 3.2.2. Service function to alter credentials

```
#include <security/pam_modules.h>
```

```
int pam_sm_setcred( pamh,  
                   flags,  
                   argc,  
                   argv);
```

```
pam_handle_t *pamh;  
int flags;  
int argc;  
const char **argv;
```

#### 3.2.2.1. DESCRIPTION

The pam\_sm\_setcred function is the service module's implementation of the pam\_setcred(3) interface.

This function performs the task of altering the credentials of the user with respect to the corresponding authorization scheme. Generally, an authentication module may have access to more information about a user than their authentication token. This function is used to make such information available to the application. It should only be called after the user has been authenticated but before a session has been established.

Valid flags, which may be logically OR'd with PAM\_SILENT, are:

#### PAM\_SILENT

Do not emit any messages.

#### PAM\_ESTABLISH\_CRED

Initialize the credentials for the user.

#### PAM\_DELETE\_CRED

Delete the credentials associated with the authentication service.

#### PAM\_REINITIALIZE\_CRED

Reinitialize the user credentials.

#### PAM\_REFRESH\_CRED

Extend the lifetime of the user credentials.

The way the auth stack is navigated in order to evaluate the pam\_setcred() function call, independent of the pam\_sm\_setcred() return codes, is exactly the same way that it was navigated when evaluating the pam\_authenticate() library call. Typically, if a stack entry was ignored in evaluating pam\_authenticate(), it will be ignored when libpam evaluates the pam\_setcred() function call. Otherwise, the return codes from each module specific pam\_sm\_setcred() call are treated as required.

#### 3.2.2.2. RETURN VALUES

##### PAM\_CRED\_UNAVAIL

This module cannot retrieve the user's credentials.

## PAM\_CRED\_EXPIRED

The user's credentials have expired.

## PAM\_CRED\_ERR

This module was unable to set the credentials of the user.

## PAM\_SUCCESS

The user credential was successfully set.

## PAM\_USER\_UNKNOWN

The user is not known to this authentication module.

These, non-PAM\_SUCCESS, return values will typically lead to the credential stack failing. The first such error will dominate in the return value of pam\_setcred().

### 3.3. Account management

#### 3.3.1. Service function for account management

```
#include <security/pam_modules.h>
```

```
int pam_sm_acct_mgmt( pamh,  
                    flags,  
                    argc,  
                    argv);
```

```
pam_handle_t  
*pamh;  
int flags;  
int argc;  
const char **argv;
```

##### 3.3.1.1. DESCRIPTION

The pam\_sm\_acct\_mgmt function is the service module's implementation of the pam\_acct\_mgmt(3) interface.

This function performs the task of establishing whether the user is permitted to gain access at this time. It should be understood that the user has previously been validated by an authentication module. This function checks for other things. Such things might be: the time of day or the date, the terminal line, remote hostname, etc. This function may also determine things like the

expiration on passwords, and respond that the user change it before continuing.

Valid flags, which may be logically OR'd with PAM\_SILENT, are:

PAM\_SILENT

Do not emit any messages.

PAM\_DISALLOW\_NULL\_AUTH Tok

Return PAM\_AUTH\_ERR if the database of authentication tokens for this authentication mechanism has a NULL entry for the user.

### 3.3.1.2. RETURN VALUES

PAM\_ACCT\_EXPIRED

User account has expired.

PAM\_AUTH\_ERR

Authentication failure.

PAM\_NEW\_AUTHTOK\_REQD

The user's authentication token has expired. Before calling this function again the application will arrange for a new one to be given. This will likely result in a call to pam\_sm\_chauthtok().

PAM\_PERM\_DENIED

Permission denied.

PAM\_SUCCESS

The authentication token was successfully updated.

PAM\_USER\_UNKNOWN

User unknown to password service.

## 3.4. Session management

### 3.4.1. Service function to start session management

```
#include <security/pam_modules.h>
```

```
int pam_sm_open_session( pamh,
```

```
        flags,  
        argc,  
        argv);  
  
pam_handle_t *pamh;  
int flags;  
int argc;  
const char **argv;
```

#### 3.4.1.1. DESCRIPTION

The `pam_sm_open_session` function is the service module's implementation of the `pam_open_session(3)` interface.

This function is called to commence a session. The only valid value for `flags` is zero or:

##### PAM\_SILENT

Do not emit any messages.

#### 3.4.1.2. RETURN VALUES

##### PAM\_SESSION\_ERR

Cannot make/remove an entry for the specified session.

##### PAM\_SUCCESS

The session was successfully started.

#### 3.4.2. Service function to terminate session management

```
#include <security/pam_modules.h>
```

```
int pam_sm_close_session( pamh,  
        flags,  
        argc,  
        argv);
```

```
pam_handle_t *pamh;  
int flags;  
int argc;  
const char **argv;
```



### 3.4.2.1. DESCRIPTION

The `pam_sm_close_session` function is the service module's implementation of the `pam_close_session(3)` interface.

This function is called to terminate a session. The only valid value for flags is zero or:

#### PAM\_SILENT

Do not emit any messages.

### 3.4.2.2. RETURN VALUES

#### PAM\_SESSION\_ERR

Cannot make/remove an entry for the specified session.

#### PAM\_SUCCESS

The session was successfully terminated.

## 3.5. Authentication token management

### 3.5.1. Service function to alter authentication token

```
#include <security/pam_modules.h>
```

```
int  
pam_sm_chauthtok( pamh,  
                 flags,  
                 argc,  
                 argv);
```

```
pam_handle_t *pamh;  
int flags;  
int argc;  
const char **argv;
```

#### 3.5.1.1. DESCRIPTION

The `pam_sm_chauthtok` function is the service module's implementation of the `pam_chauthtok(3)` interface.

This function is used to (re-)set the authentication token of the user.

Valid flags, which may be logically OR'd with `PAM_SILENT`, are:

## PAM\_SILENT

Do not emit any messages.

## PAM\_CHANGE\_EXPIRED\_AUTHTOK

This argument indicates to the module that the user's authentication token (password) should only be changed if it has expired. This flag is optional and must be combined with one of the following two flags. Note, however, the following two options are mutually exclusive.

## PAM\_PRELIM\_CHECK

This indicates that the modules are being probed as to their ready status for altering the user's authentication token. If the module requires access to another system over some network it should attempt to verify it can connect to this system on receiving this flag. If a module cannot establish it is ready to update the user's authentication token it should return PAM\_TRY\_AGAIN, this information will be passed back to the application.

If the control value sufficient is used in the password stack, the PAM\_PRELIM\_CHECK section of the modules following that control value is not always executed.

## PAM\_UPDATE\_AUTHTOK

This informs the module that this is the call it should change the authorization tokens. If the flag is logically OR'd with PAM\_CHANGE\_EXPIRED\_AUTHTOK, the token is only changed if it has actually expired.

The PAM library calls this function twice in succession. The first time with PAM\_PRELIM\_CHECK and then, if the module does not return PAM\_TRY\_AGAIN, subsequently with PAM\_UPDATE\_AUTHTOK. It is only on the second call that the authorization token is (possibly) changed.

### 3.5.1.2. RETURN VALUES

#### PAM\_AUTHTOK\_ERR

The module was unable to obtain the new authentication token.

#### PAM\_AUTHTOK\_RECOVERY\_ERR

The module was unable to obtain the old authentication token.

#### PAM\_AUTHTOK\_LOCK\_BUSY

Cannot change the authentication token since it is currently locked.

#### PAM\_AUTHTOK\_DISABLE\_AGING

Authentication token aging has been disabled.

#### PAM\_PERM\_DENIED

Permission denied.

#### PAM\_TRY\_AGAIN

Preliminary check was unsuccessful. Signals an immediate return to the application is desired.

#### PAM\_SUCCESS

The authentication token was successfully updated.

#### PAM\_USER\_UNKNOWN

User unknown to password service.

#### Chapter 4. Generic optional arguments

Here we list the generic arguments that all modules can expect to be passed. They are not mandatory, and their absence should be accepted without comment by the module.

##### debug

Use the `pam_syslog(3)` call to log debugging information to the system log files.

##### use\_first\_pass

The module should not prompt the user for a password. Instead, it should obtain the previously typed password (by a call to `pam_get_item()` for the `PAM_AUTHTOK` item), and use that. If that doesn't work, then the user will not be authenticated. (This option is intended for `auth` and `passwd` modules only).

#### Chapter 5. Programming notes

Here we collect some pointers for the module writer to bear in mind when writing/developing a Linux-PAM compatible module.

## 5.1. Security issues for module creation

### 5.1.1. Sufficient resources

Care should be taken to ensure that the proper execution of a module is not compromised by a lack of system resources. If a module is unable to open sufficient files to perform its task, it should fail gracefully, or request additional resources. Specifically, the quantities manipulated by the `setrlimit(2)` family of commands should be taken into consideration.

### 5.1.2. Who's who?

Generally, the module may wish to establish the identity of the user requesting a service. This may not be the same as the username returned by `pam_get_user()`. Indeed, that is only going to be the name of the user under whose identity the service will be given. This is not necessarily the user that requests the service.

In other words, user X runs a program that is `setuid-Y`, it grants the user to have the permissions of Z. A specific example of this sort of service request is the `su` program: user joe executes `su` to become the user jane. In this situation `X=joe`, `Y=root` and `Z=jane`. Clearly, it is important that the module does not confuse these different users and grant an inappropriate level of privilege.

The following is the convention to be adhered to when juggling user-identities.

- X, the identity of the user invoking the service request. This is the user identifier; returned by the function `getuid(2)`.
- Y, the privileged identity of the application used to grant the requested service. This is the effective user identifier; returned by the function `geteuid(2)`.
- Z, the user under whose identity the service will be granted. This is the username returned by `pam_get_user()` and also stored in the Linux-PAM item, `PAM_USER`.
- Linux-PAM has a place for an additional user identity that a module may care to make use of. This is the `PAM_RUSER` item. Generally, network sensitive modules/applications may wish to set/read this item to establish the identity of the user requesting a service from a remote location.

Note, if a module wishes to modify the identity of either the uid or euid of the running process, it should take care to restore the original values prior to returning control to the Linux-PAM library.

### 5.1.3. Using the conversation function

Prior to calling the conversation function, the module should reset the contents of the pointer that will return the applications response. This is a good idea since the application may fail to fill the pointer and the module should be in a position to notice!

The module should be prepared for a failure from the conversation. The generic error would be PAM\_CONV\_ERR, but anything other than PAM\_SUCCESS should be treated as indicating failure.

### 5.1.4. Authentication tokens

To ensure that the authentication tokens are not left lying around the items, PAM\_AUTHTOK and PAM\_OLDAUTHTOK, are not available to the application: they are defined in <security/pam\_modules.h>. This is ostensibly for security reasons, but a maliciously programmed application will always have access to all memory of the process, so it is only superficially enforced. As a general rule the module should overwrite authentication tokens as soon as they are no longer needed. Especially before free()'ing them. The Linux-PAM library is required to do this when either of these authentication token items are (re)set.

Not to dwell too little on this concern; should the module store the authentication tokens either as (automatic) function variables or using pam\_[gs]et\_data() the associated memory should be over-written explicitly before it is released. In the case of the latter storage mechanism, the associated cleanup() function should explicitly overwrite the \*data before free()'ing it: for example,

```
/*  
 * An example cleanup() function for releasing memory that was used to  
 * store a password.  
 */
```

```
int cleanup(pam_handle_t *pamh, void *data, int error_status)  
{  
    char *xx;  
  
    if ((xx = data) {  
        while (*xx)  
            *xx++ = '\0';  
        free(data);  
    }
```

```
}  
return PAM_SUCCESS;  
}
```

## 5.2. Use of syslog(3)

Only rarely should error information be directed to the user. Usually, this is to be limited to “sorry you cannot login now” type messages. Information concerning errors in the configuration file, `/etc/pam.conf`, or due to some system failure encountered by the module, should be written to `syslog(3)` with facility-type `LOG_AUTHPRIV`.

With a few exceptions, the level of logging is, at the discretion of the module developer. Here is the recommended usage of different logging levels:

- As a general rule, errors encountered by a module should be logged at the `LOG_ERR` level. However, information regarding an unrecognized argument, passed to a module from an entry in the `/etc/pam.conf` file, is required to be logged at the `LOG_ERR` level.
- Debugging information, as activated by the `debug` argument to the module in `/etc/pam.conf`, should be logged at the `LOG_DEBUG` level.
- If a module discovers that its personal configuration file or some system file it uses for information is corrupted or somehow unusable, it should indicate this by logging messages at level, `LOG_ALERT`.
- Shortages of system resources, such as a failure to manipulate a file or `malloc()` failures should be logged at level `LOG_CRIT`.
- Authentication failures, associated with an incorrectly typed password should be logged at level, `LOG_NOTICE`.

## 5.3. Modules that require system libraries

Writing a module is much like writing an application. You have to provide the “conventional hooks” for it to work correctly, like `pam_sm_authenticate()` etc., which would correspond to the `main()` function in a normal function.

Typically, the author may want to link against some standard system libraries. As when one compiles a normal program, this can be done for modules too: you simply append the `-lXXX` arguments for the desired libraries when you create the shared module object. To make sure a module is linked to the `libwhatever.so` library when it is `dlopen()`ed, try:

```
% gcc -shared -o pam_module.so pam_module.o -lwhatever
```

## Chapter 6. An example module

At some point, we may include a fully commented example of a module in this document. For now, please look at the modules directory of the Linux-PAM sources.

## Chapter 7. See also

- The Linux-PAM System Administrators' Guide.
- The Linux-PAM Application Developers' Guide.
- The V. Samar and R. Schemers (SunSoft), ``UNIFIED LOGIN WITH PLUGGABLE AUTHENTICATION MODULES'', Open Software Foundation Request For Comments 86.0, October 1995.

## Chapter 8. Author/acknowledgments

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## Chapter 9. Copyright information for this document

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Found in path(s):

\* /opt/cola/permits/1822720343\_1704297183.37862/0/linux-pam-1-5-3-docs-tar-xz/Linux-PAM-1.5.3/doc/mwg/Linux-PAM\_MWG.txt

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The Linux-PAM System Administrators' Guide

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## Abstract

This manual documents what a system-administrator needs to know about the Linux-PAM library. It covers the correct syntax of the PAM configuration file and discusses strategies for maintaining a secure system.

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## Chapter 1. Introduction

Linux-PAM (Pluggable Authentication Modules for Linux) is a suite of shared libraries that enable the local system administrator to choose how applications authenticate users.

In other words, without (rewriting and) recompiling a PAM-aware application, it is possible to switch between the authentication mechanism(s) it uses. Indeed, one may entirely upgrade the local authentication system without touching the applications themselves.

Historically an application that has required a given user to be authenticated, has had to be compiled to use a specific authentication mechanism. For example, in the case of traditional UN\*X systems, the identity of the user is verified by the user entering a correct password. This password, after being prefixed by a two character ``salt'', is encrypted (with crypt(3)). The user is then authenticated if this encrypted password is identical to the second field of the user's entry in the system password database (the /etc/passwd file). On

such systems, most if not all forms of privileges are granted based on this single authentication scheme. Privilege comes in the form of a personal user-identifier (UID) and membership of various groups. Services and applications are available based on the personal and group identity of the user. Traditionally, group membership has been assigned based on entries in the `/etc/group` file.

It is the purpose of the Linux-PAM project to separate the development of privilege granting software from the development of secure and appropriate authentication schemes. This is accomplished by providing a library of functions that an application may use to request that a user be authenticated.

This PAM library is configured locally with a system file, `/etc/pam.conf` (or a series of configuration files located in `/etc/pam.d/`) to authenticate a user request via the locally available authentication modules. The modules themselves will usually be located in the directory `/lib/security` or `/lib64/security` and take the form of dynamically loadable object files (see `dlopen(3)`).

## Chapter 2. Some comments on the text

Before proceeding to read the rest of this document, it should be noted that the text assumes that certain files are placed in certain directories. Where they have been specified, the conventions we adopt here for locating these files are those of the relevant RFC (RFC-86.0, see bibliography"). If you are using a distribution of Linux (or some other operating system) that supports PAM but chooses to distribute these files in a different way you should be careful when copying examples directly from the text.

As an example of the above, where it is explicit, the text assumes that PAM loadable object files (the modules) are to be located in the following directory: `/lib/security/` or `/lib64/security` depending on the architecture. This is generally the location that seems to be compatible with the Filesystem Hierarchy Standard (FHS). On Solaris, which has its own licensed version of PAM, and some other implementations of UN\*X, these files can be found in `/usr/lib/security`. Please be careful to perform the necessary transcription when using the examples from the text.

## Chapter 3. Overview

For the uninitiated, we begin by considering an example. We take an application that grants some service to users; `login` is one such program. `login` does two things, it first establishes that the requesting user is whom they claim to be and second provides them with the requested service: in the case of `login` the service is a command shell (`bash`, `tcsh`, `zsh`, etc.) running with the identity of the user.

Traditionally, the former step is achieved by the login application prompting the user for a password and then verifying that it agrees with that located on the system; hence verifying that as far as the system is concerned the user is who they claim to be. This is the task that is delegated to Linux-PAM.

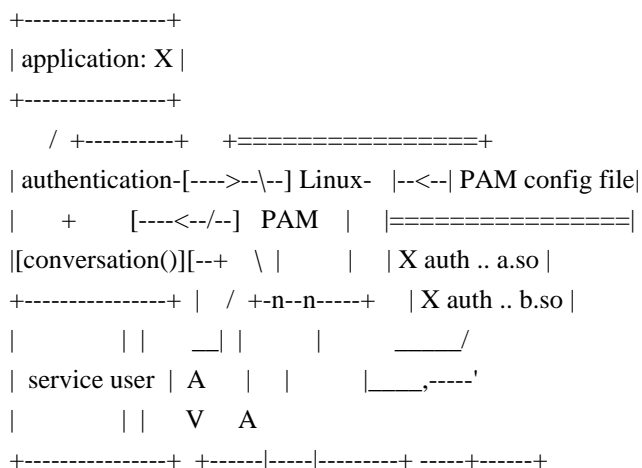
From the perspective of the application programmer (in this case the person that wrote the login application), Linux-PAM takes care of this authentication task -- verifying the identity of the user.

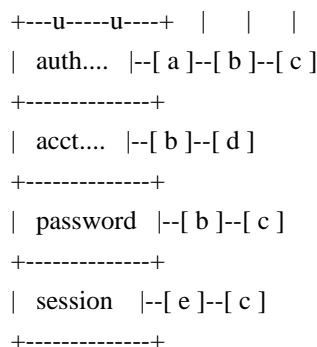
The flexibility of Linux-PAM is that you, the system administrator, have the freedom to stipulate which authentication scheme is to be used. You have the freedom to set the scheme for any/all PAM-aware applications on your Linux system. That is, you can authenticate from anything as naive as simple trust ( pam\_permit) to something as paranoid as a combination of a retinal scan, a voice print and a one-time password!

To illustrate the flexibility you face, consider the following situation: a system administrator (parent) wishes to improve the mathematical ability of her users (children). She can configure their favorite "Shoot 'em up game" (PAM-aware of course) to authenticate them with a request for the product of a couple of random numbers less than 12. It is clear that if the game is any good they will soon learn their multiplication tables. As they mature, the authentication can be upgraded to include (long) division!

Linux-PAM deals with four separate types of (management) task. These are: authentication management; account management; session management; and password management. The association of the preferred management scheme with the behavior of an application is made with entries in the relevant Linux-PAM configuration file. The management functions are performed by modules specified in the configuration file. The syntax for this file is discussed in the section below.

Here is a figure that describes the overall organization of Linux-PAM:





By

way of explanation, the left of the figure represents the application; application X. Such an application interfaces with the Linux-PAM library and knows none of the specifics of its configured authentication method. The Linux-PAM library (in the center) consults the contents of the PAM configuration file and loads the modules that are appropriate for application-X. These modules fall into one of four management groups (lower-center) and are stacked in the order they appear in the configuration file. These modules, when called by Linux-PAM, perform the various authentication tasks for the application. Textual information, required from/or offered to the user, can be exchanged through the use of the application-supplied conversation function.

If a program is going to use PAM, then it has to have PAM functions explicitly coded into the program. If you have access to the source code you can add the appropriate PAM functions. If you do not have access to the source code, and the

binary does not have the PAM functions included, then it is not possible to use PAM.

#### Chapter 4. The Linux-PAM configuration file

When a PAM aware privilege granting application is started, it activates its attachment to the PAM-API. This activation performs a number of tasks, the most important being the reading of the configuration file(s): `/etc/pam.conf`. Alternatively and preferably, the configuration can be set by individual configuration files located in a `pam.d` directory. The presence of this directory will cause Linux-PAM to ignore `/etc/pam.conf`.

These files list the PAMs that will do the authentication tasks required by this service, and the appropriate behavior of the PAM-API in the event that individual PAMs fail.

##### 4.1. Configuration file syntax

The syntax of the `/etc/pam.conf` configuration file is as follows. The file is made up of a list of rules, each rule is typically placed on a single line, but

may be extended with an escaped end of line: ``\<LF>'`. Comments are preceded with

``#'` marks and extend to the next end of line.

The format of each rule is a space separated collection of tokens, the first three being case-insensitive:

service type control module-path module-arguments

The syntax of files contained in the `/etc/pam.d/` directory, are identical except for the absence of any service field. In this case, the service is the name of the file in the `/etc/pam.d/` directory. This filename must be in lower case.

An important feature of PAM, is that a number of rules may be stacked to combine the services of a number of PAMs for a given authentication task.

The service is typically the familiar name of the corresponding application: `login` and `su` are good examples. The service-name, `other`, is reserved for giving default rules. Only lines that mention the current service (or in the absence of such, the `other` entries) will be associated with the given service-application.

The type is the management group that the rule corresponds to. It is used to specify

which of the management groups the subsequent module is to be associated with. Valid entries are:

`account`

this module type performs non-authentication based account management. It is typically used to restrict/permit access to a service based on the time of day, currently available system resources (maximum number of users) or perhaps the location of the applicant user -- `'root'` login only on the console.

`auth`

this module type provides two aspects of authenticating the user. Firstly, it establishes that the user is who they claim to be, by instructing the application to prompt the user for a password or other means of identification. Secondly, the module can grant group membership or other privileges through its credential granting properties.

`password`

this module type is required for updating the authentication token associated with the user. Typically, there is one module for each

'challenge/response' based authentication  
(auth) type.

session

this module type is associated with doing things that need to be done for the user before/after they can be given service. Such things include the logging of information concerning the opening/closing of some data exchange with a user, mounting directories, etc.

If the type value from the list above is prepended with a - character the PAM library will not log to the system log if it is not possible to load the module because it is missing in the system. This can be useful especially for modules which are not always installed on the system and are not required for correct authentication and authorization of the login session.

The third field, control, indicates the behavior of the PAM-API should the module fail to succeed in its authentication task. There are two types of syntax for this control field: the simple one has a single simple keyword; the more complicated one involves a square-bracketed selection of value=action pairs.

For the simple  
(historical) syntax valid control values are:

required

failure of such a PAM will ultimately lead to the PAM-API returning failure but only after the remaining stacked modules (for this service and type) have been invoked.

requisite

like required, however, in the case that such a module returns a failure, control is directly returned to the application or to the superior PAM stack. The return value is that associated with the first required or requisite module to fail. Note, this flag can be used to protect against the possibility of a user getting the opportunity to enter a password over an unsafe medium. It is conceivable that such behavior might inform an attacker of valid accounts on a system. This possibility should be weighed against the not insignificant concerns of exposing a sensitive password in a hostile environment.

sufficient

if such a module succeeds and no prior required module has failed the PAM framework

returns success to the application or to the superior PAM stack immediately without calling any further modules in the stack. A failure of a sufficient module is ignored and processing of the PAM module stack continues unaffected.

optional

the success or failure of this module is only important if it is the only module in the stack associated with this service+type.

include

include all lines of given type from the configuration file specified as an argument to this control.

substack

include all lines of given type from the configuration file specified as an argument to this control. This differs from include in that evaluation of the done and die actions in a substack does not cause skipping the rest of the complete module stack, but only of the substack. Jumps in a substack also can not make evaluation jump out of it, and the whole substack is counted as one module when the jump is done in a parent stack. The reset action will

reset the state of a module stack to the state it was in as of beginning of the substack evaluation.

For the more complicated syntax valid control values have the following form:

```
[value1=action1 value2=action2 ...]
```

Where valueN corresponds to the return code from the function invoked in the module for which the line is defined. It is selected from one of these: success, open\_err, symbol\_err, service\_err, system\_err, buf\_err, perm\_denied, auth\_err, cred\_insufficient, authinfo\_unavail, user\_unknown, maxtries, new\_authtok\_reqd, acct\_expired, session\_err, cred\_unavail, cred\_expired, cred\_err, no\_module\_data, conv\_err, authtok\_err, authtok\_recover\_err, authtok\_lock\_busy, authtok\_disable\_aging, try\_again, ignore, abort, authtok\_expired, module\_unknown, bad\_item, conv\_again, incomplete, and default.

The last of these, default, implies 'all valueN's not mentioned explicitly.

Note, the full list of PAM errors is available in /usr/include/security/

\_pam\_types.h. The actionN

can take one of the following forms:

ignore



when used with a stack of modules, the module's return status will not contribute to the return code the application obtains.

bad

this action indicates that the return code should be thought of as indicative of the module failing. If this module is the first in the stack to fail, its status value will be used for that of the whole stack. This is the default action for all return codes.

die

equivalent to bad with the side effect of terminating the module stack and PAM immediately returning to the application.

ok

this tells PAM that the administrator thinks this return code should contribute directly to the return code of the full stack of modules. In other words, if the former state of the stack would lead to a return of PAM\_SUCCESS, the module's return code will override this value. Note, if the former state of the stack holds some value that is indicative of a modules failure, this 'ok' value will not be used to override that value.

done

equivalent to ok with the side effect of terminating the module stack and PAM immediately returning to the application unless there was a non-ignored module failure before.

N (an unsigned integer)

jump over the next N modules in the stack. Note that N equal to 0 is not allowed, it would be treated as ignore in such case. The side effect depends on the PAM function call: for pam\_authenticate, pam\_acct\_mgmt, pam\_chauthtok, and pam\_open\_session it is ignore; for pam\_setcred and pam\_close\_session it is one of ignore, ok, or bad depending on the module's return value.

reset

clear all memory of the state of the module stack and start again with the next stacked module.

If a return code's action is not specifically defined via a valueN token, and the default value is not specified, that return code's action defaults to bad.

Each of the four keywords: required; requisite; sufficient; and optional, have an equivalent expression in terms of the [...] syntax. They are as follows:

required

```
[success=ok new_authtok_reqd=ok ignore=ignore default=bad]
```

requisite

```
[success=ok new_authtok_reqd=ok ignore=ignore default=die]
```

sufficient

```
[success=done new_authtok_reqd=done default=ignore]
```

optional

```
[success=ok new_authtok_reqd=ok default=ignore]
```

module-path is either the full filename of the PAM to be used by the application (it begins with a '/'), or a relative pathname from the default module location: /lib/security/ or /lib64/security/, depending on the architecture.

module-arguments are a space separated list of tokens that can be used to modify the specific behavior of the given PAM. Such arguments will be documented for each individual module. Note, if you wish to include spaces in an argument, you should surround that argument with square brackets.

```
squid auth required pam_mysql.so user=passwd_query passwd=mada \
    db=eminence [query=select
user_name from internet_service \
    where user_name='%u' and password=PASSWORD('%p') and \
    service='web_proxy']
```

When using this convention, you can include '[' characters inside the string, and if you wish to include a ']' character inside the string that will survive the argument parsing, you should use '\]'. In other words:

```
[..\]\] --> ..[\].
```

Any line in (one of) the configuration file(s), that is not formatted correctly, will generally tend (erring on the side of caution) to make the authentication process fail. A corresponding error is written to the system log files with a call to syslog(3).

## 4.2. Directory based configuration

More flexible than the single configuration file is it to configure libpam via the contents of pam.d directories. In this case the directories are filled with files each of which has a filename equal to a service-name (in lower-case): it is the personal configuration file for the named service.

### Vendor-supplied

PAM configuration files might be installed in the system directory `/usr/lib/pam.d/` or a configurable vendor specific directory instead of the machine configuration directory `/etc/pam.d/`. If no machine configuration file is found, the vendor-supplied file is used. All files in `/etc/pam.d/` override files with the same name in other directories.

The syntax of each file in pam.d is similar to that of the `/etc/pam.conf` file and is made up of lines of the following form:

```
type control module-path module-arguments
```

The only difference being that the service-name is not present. The service-name is of course the name of the given configuration file. For example, `/etc/pam.d/login` contains the configuration for the login service.

## 4.3. Example configuration file entries

In this section, we give some examples of entries that can be present in the Linux-PAM configuration file. As a first attempt at configuring your system you could do worse than to implement these.

If a system is to be considered secure, it had better have a reasonably secure 'other' entry. The following is a paranoid setting (which is not a bad place to start!):

```
#
# default; deny access
#
other auth required pam_deny.so
other account required pam_deny.so
other password required pam_deny.so
other session required pam_deny.so
```

Whilst fundamentally a secure default, this is not very sympathetic to a misconfigured system. For example, such a system is vulnerable to locking everyone out should the rest of the file become badly written.

The module `pam_deny` (documented in a later section) is not very sophisticated. For example, it logs no information when it is invoked so unless the users of a system contact the administrator when failing to execute a service application, the administrator may go for a long while in ignorance of the fact that his system is misconfigured.

The addition of the following line before those in the above example would provide a suitable warning to the administrator.

```
#
# default; wake up! This application is not configured
#
other auth required pam_warn.so
other password required pam_warn.so
```

Having two 'other auth' lines is an example of stacking.

On a system that uses the `/etc/pam.d/` configuration, the corresponding default setup would be achieved with the following file:

```
#
# default configuration: /etc/pam.d/other
#
auth required pam_warn.so
auth required pam_deny.so
account required pam_deny.so
password required pam_warn.so
password required pam_deny.so
session required pam_deny.so
```

This is the only explicit example we give for an `/etc/pam.d/` file. In general, it should be clear how to transpose the remaining examples to this configuration scheme.

On a less sensitive computer, one on which the system administrator wishes to remain ignorant of much of the power of Linux-PAM, the following selection of lines (in `/etc/pam.d/other`) is likely to mimic the historically familiar Linux setup.

```
#
# default; standard UN*X access
#
auth required pam_unix.so
```

```
account required pam_unix.so
password required pam_unix.so
session required pam_unix.so
```

In general this will provide a starting place for most applications.

## Chapter 5. Security issues

### 5.1. If something goes wrong

Linux-PAM has the potential to seriously change the security of your system. You can choose to have no security or absolute security (no access permitted). In general, Linux-PAM errs towards the latter. Any number of configuration errors can disable access to your system partially, or completely.

The most dramatic problem that is likely to be encountered when configuring Linux-PAM is that of deleting the configuration file(s): `/etc/pam.d/*` and/or `/etc/pam.conf`. This will lock you out of your own system!

To recover, your best bet is to restore the system from a backup or boot the system into a rescue system and correct things from there.

### 5.2.

Avoid having a weak `other' configuration

It is not a good thing to have a weak default (other) entry. This service is the default configuration for all PAM aware applications and if it is weak, your system is likely to be vulnerable to attack.

Here is a sample "other" configuration file. The `pam_deny` module will deny access and the `pam_warn` module will send a syslog message to `auth.notice`:

```
#
# The PAM configuration file for the `other' service
#
auth    required pam_deny.so
auth    required pam_warn.so
account required pam_deny.so
account required pam_warn.so
password required pam_deny.so
password required pam_warn.so
session required pam_deny.so
session required pam_warn.so
```

## Chapter 6. A reference guide for available modules

Here, we collect together the descriptions of the various modules coming with Linux-PAM.

### 6.1. pam\_access - logdaemon style login access control

```
pam_access.so [ debug ] [ nodefgroup ] [ noaudit ] [ accessfile=file ] [
fieldsep=sep
] [ listsep=sep ]
```

#### 6.1.1. DESCRIPTION

The pam\_access PAM module is mainly for access management. It provides logdaemon style login access control based on login names, host or domain names, internet addresses or network numbers, or on terminal line names, X \$DISPLAY values, or PAM service names in case of non-networked logins.

By default rules for access management are taken from config file /etc/security/access.conf if you don't specify another file. Then individual \*.conf files from the /etc/security/access.d/ directory are read. The files are parsed one after another in the order of the system locale. The effect of the individual files is the same as if all the files were concatenated together in the order of parsing. This means that once a pattern is matched in some file no further files are parsed. If a config file is explicitly specified with the accessfile option the files in the above directory are not parsed.

By default rules for access management are taken from config file /etc/security/access.conf or, if that one is not present, the file %vendordir%/security/access.conf. These settings can be overruled by setting in a config file explicitly specified with the accessfile option. Then individual \*.conf files from the /etc/security/access.d/ and %vendordir%/security/access.d directories are read. If /etc/security/access.d/@filename@.conf exists, then %vendordir%/security/access.d/@filename@.conf will not be used. All access.d/\*.conf files are sorted by their @filename@.conf in lexicographic order regardless of which of the directories they reside in. The effect of the individual files is the same as if all the files were concatenated together in the order of parsing. This means that once a pattern is matched in some file no further files are parsed. If a config file is explicitly specified with the accessfile option the files in the above directories are not parsed.

If Linux PAM is compiled with audit support the module will report when it denies access based on origin (host, tty, etc.).

#### 6.1.2. DESCRIPTION

The /etc/security/access.conf file specifies (user/group, host), (user/group, network/netmask), (user/group, tty), (user/group, X-\$DISPLAY-value), or (user/

group, pam-service-name) combinations for which a login will be either accepted or refused.

When someone logs in, the file access.conf is scanned for the first entry that matches the (user/group, host) or (user/group, network/netmask) combination, or, in case of non-networked logins, the first entry that matches the (user/group, tty) combination, or in the case of non-networked logins without a tty, the first entry that matches the (user/group, X-\$DISPLAY-value) or (user/group, pam-service-name/) combination. The permissions field of that table entry determines whether the login will be accepted or refused.

Each line of the login access control table has three fields separated by a ":" character (colon):

```
permission:users/groups:origins
```

The first field, the permission field, can be either a "+" character (plus) for access granted or a "-" character (minus) for access denied.

The second field, the users/group field, should be a list of one or more login names, group names, or ALL (which always matches). To differentiate user entries from group entries, group entries should be written with brackets, e.g. (group).

The third field, the origins field, should be a list of one or more tty names (for non-networked logins), X \$DISPLAY values or PAM service names (for non-networked logins without a tty), host names, domain names (begin with "."), host addresses, internet network numbers (end with "."), internet network addresses with network mask (where network mask can be a decimal number or an internet address also), ALL (which always matches) or LOCAL. The LOCAL keyword matches if and only if pam\_get\_item(3), when called with an item\_type of PAM\_RHOST, returns NULL or an empty string (and therefore the origins field is compared against the return value of pam\_get\_item(3) called with an item\_type of PAM\_TTY or, absent that, PAM\_SERVICE).

If supported by the system you can use @netgroupname in host or user patterns. The @@netgroupname syntax is supported in the user pattern only and it makes the local system hostname to be passed to the netgroup match call in addition to the user name. This might not work correctly on some libc implementations causing the match to always fail.

The EXCEPT operator makes it possible to write very compact rules.

If the nodelgroup is not set, the group file is searched when a name does not match that of the logged-in user. Only groups are matched in which users are explicitly listed. However the PAM module does not look at the primary group id

of a user.

The "#" character at start of line (no space at front) can be used to mark this line as a comment line.

### 6.1.3. OPTIONS

`accessfile=/path/to/access.conf`

Indicate an alternative `access.conf` style configuration file to override the default.

This can be useful when different services need different access lists.

`debug`

A lot of debug information is printed with `syslog(3)`.

`noaudit`

Do not report logins from disallowed hosts and ttys to the audit subsystem.

`fieldsep=separators`

This option modifies the field separator character that `pam_access` will recognize when parsing the access configuration file. For example: `fieldsep=|` will cause the default ``:` character to be treated as part of a field value and ``|` becomes the field separator. Doing this may be useful in conjunction with a system that wants to use `pam_access` with X based applications, since the `PAM_TTY` item is likely to be of the form `"hostname:0"` which includes a ``:` character in its value. But you should not need this.

`listsep=separators`

This option modifies the list separator character that `pam_access` will recognize when parsing the access configuration file. For example: `listsep=,` will cause the default `` `` (space) and ``\t` (tab) characters to be treated as part of a list element value and ``,`` becomes the only list element separator. Doing this may be useful on a system with group information obtained from a Windows domain, where the default built-in groups `"Domain Users"`, `"Domain Admins"` contain a space.

`nodefgroup`

User tokens which are not enclosed in parentheses will not be matched against the group database. The backwards compatible default is to try the



group database match even for tokens not enclosed in parentheses.

#### 6.1.4. MODULE TYPES PROVIDED

All module types (auth, account, password and session) are provided.

#### 6.1.5. RETURN VALUES

##### PAM\_SUCCESS

Access was granted.

##### PAM\_PERM\_DENIED

Access was not granted.

##### PAM\_IGNORE

pam\_setcred was called which does nothing.

##### PAM\_ABORT

Not all relevant data or options could be gotten.

##### PAM\_USER\_UNKNOWN

The user is not known to the system.

#### 6.1.6. FILES

/etc/security/access.conf

Default configuration file

%vendordir%/security/access.conf

Default configuration file if /etc/security/access.conf does not exist.

#### 6.1.7. EXAMPLES

These are some example lines which might be specified in /etc/security/access.conf.

User root should be allowed to get access via cron, X11 terminal :0, tty1, ..., tty5, tty6.

```
+:root:cron :0 tty1 tty2 tty3 tty4 tty5 tty6
```

User root should be allowed to get access from hosts which own the IPv4 addresses. This does not mean that the connection have to be a IPv4 one, a IPv6 connection from a host with one of this IPv4 addresses does work, too.

```
+:root:192.168.200.1 192.168.200.4 192.168.200.9
```

```
+:root:127.0.0.1
```

User root should get access from network 192.168.201. where the term will be evaluated by string matching. But it might be better to use network/netmask instead. The same meaning of 192.168.201. is 192.168.201.0/24 or 192.168.201.0/255.255.255.0.

```
+:root:192.168.201.
```

User root should be able to have access from hosts  
foo1.bar.org and  
foo2.bar.org (uses string matching also).

```
+:root:foo1.bar.org foo2.bar.org
```

User root should be able to have access from domain foo.bar.org (uses string matching also).

```
+:root:.foo.bar.org
```

User root should be denied to get access from all other sources.

```
-.root:ALL
```

User foo and members of netgroup admins should be allowed to get access from all sources. This will only work if netgroup service is available.

```
+:@admins foo:ALL
```

User john and foo should get access from IPv6 host address.

```
+:john foo:2001:db8:0:101::1
```

User john should get access from IPv6 net/mask.

```
+:john:2001:db8:0:101::/64
```

Members of group wheel should be allowed to get access from all sources.

```
+: (wheel):ALL
```

Disallow console logins to all but the shutdown, sync and all other accounts,

which are a member of the wheel group.

```
-.:ALL EXCEPT (wheel) shutdown sync:LOCAL
```

All other users should be denied to get access from all sources.

```
-.:ALL:ALL
```

### 6.1.8. AUTHORS

The logdaemon style login access control

scheme was designed and implemented by

Wietse Venema. The pam\_access PAM module was developed by Alexei Nogin

<alexei@nogin.dnttm.ru>. The IPv6 support and the network(address) / netmask

feature was developed and provided by Mike Becher

<mike.becher@lrz-muenchen.de>.

### 6.2. pam\_debug - debug the PAM stack

```
pam_debug.so [ auth=value ] [ cred=value ] [ acct=value ] [ prechauthtok=value ] [ chauthtok=value ] [ auth=value ] [ open_session=value ] [ close_session=value ]
```

#### 6.2.1. DESCRIPTION

The pam\_debug PAM module is intended as a debugging aide for determining how the PAM stack is operating. This module returns what its module arguments tell it to return.

#### 6.2.2. OPTIONS

auth=value

The pam\_sm\_authenticate(3) function will return value.

cred=value

The pam\_sm\_setcred(3) function will return value.

acct=value

The pam\_sm\_acct\_mgmt(3) function will return value.

prechauthtok=value

The pam\_sm\_chauthtok(3) function will return value if the PAM\_PRELIM\_CHECK flag

is set.

chauthtok=value

The pam\_sm\_chauthtok(3) function will return value if the PAM\_PRELIM\_CHECK flag is not set.

open\_session=value

The pam\_sm\_open\_session(3) function will return value.

close\_session=value

The pam\_sm\_close\_session(3) function will return value.

Where value can be one of: success, open\_err, symbol\_err, service\_err, system\_err, buf\_err, perm\_denied, auth\_err, cred\_insufficient, authinfo\_unavail, user\_unknown, maxtries, new\_authtok\_reqd, acct\_expired, session\_err, cred\_unavail, cred\_expired, cred\_err, no\_module\_data, conv\_err, authtok\_err, authtok\_recover\_err, authtok\_lock\_busy, authtok\_disable\_aging, try\_again, ignore, abort, authtok\_expired, module\_unknown, bad\_item, conv\_again, incomplete.

### 6.2.3. MODULE TYPES PROVIDED

All module types (auth, account, password and session) are provided.

### 6.2.4. RETURN VALUES

#### PAM\_SUCCESS

Default return code if no other value was specified, else specified return value.

### 6.2.5. EXAMPLES

```
auth requisite
    pam_permit.so
auth [success=2 default=ok] pam_debug.so auth=perm_denied cred=success
auth [default=reset] pam_debug.so auth=success cred=perm_denied
auth [success=done default=die] pam_debug.so
auth optional pam_debug.so auth=perm_denied cred=perm_denied
auth sufficient pam_debug.so auth=success cred=success
```

### 6.2.6. AUTHOR

pam\_debug was written by Andrew G. Morgan <morgan@kernel.org>.

## 6.3. pam\_deny - locking-out PAM module

pam\_deny.so

### 6.3.1. DESCRIPTION

This module can be used to deny access. It always indicates a failure to the application through the PAM framework. It might be suitable for using for default (the OTHER) entries.

### 6.3.2. OPTIONS

This module does not recognise any options.

### 6.3.3. MODULE TYPES PROVIDED

All module types (account, auth, password and session) are provided.

### 6.3.4. RETURN VALUES

#### PAM\_AUTH\_ERR

This is returned by the account and auth services.

#### PAM\_CRED\_ERR

This is returned by the setcred function.

#### PAM\_AUTHTOK\_ERR

This is returned by the password service.

#### PAM\_SESSION\_ERR

This is returned by the session service.

### 6.3.5. EXAMPLES

```
##%PAM-1.0
#
# If we don't have config entries for a service, the
# OTHER entries are used. To be secure, warn and deny
# access to everything.
other auth    required    pam_warn.so
other auth    required    pam_deny.so
other account required    pam_warn.so
other account required    pam_deny.so
```

other password required	pam_warn.so
other password required	pam_deny.so
other session required	pam_warn.so
other session required	pam_deny.so

### 6.3.6. AUTHOR

pam\_deny was written by Andrew G. Morgan <morgan@kernel.org>

## 6.4. pam\_echo - print text messages

pam\_echo.so [ file=/path/message ]

### 6.4.1. DESCRIPTION

The pam\_echo PAM module is for printing text messages to inform user about special things. Sequences starting with the % character are interpreted in the following way:

%H

The name of the remote host (PAM\_RHOST).

%h

The name of the local host.

%s

The service name (PAM\_SERVICE).

%t

The name of the controlling terminal (PAM\_TTY).

%U

The remote user name (PAM\_RUSER).

%u

The local user name (PAM\_USER).

All other sequences beginning with % expands to the characters following the % character.

## 6.4.2. OPTIONS

file=/path/message

The content of the file /path/message will be printed with the PAM conversion function as PAM\_TEXT\_INFO.

## 6.4.3. MODULE TYPES PROVIDED

All module types (auth, account, password and session) are provided.

## 6.4.4. RETURN VALUES

PAM\_BUF\_ERR

Memory buffer error.

PAM\_SUCCESS

Message was successful printed.

PAM\_IGNORE

PAM\_SILENT flag was given or message file does not exist, no message printed.

## 6.4.5. EXAMPLES

For an example of the use of this module, we show how it may be used to print information about good passwords:

```
password optional pam_echo.so file=/usr/share/doc/good-password.txt
password required
pam_unix.so
```

## 6.4.6. AUTHOR

Thorsten Kukuk <kukuk@thkukuk.de>

## 6.5. pam\_env - set/unset environment variables

```
pam_env.so [ debug ] [ conffile=conf-file ] [ envfile=env-file ] [ readenv=0|1 ]
[ user_envfile=env-file ] [ user_readenv=0|1 ]
```

### 6.5.1. DESCRIPTION

The pam\_env PAM module allows the (un)setting of environment variables.

Supported is the use of previously set environment variables as well as PAM\_ITEMS such as PAM\_RHOST.

Rules for (un)setting of variables can be defined in an own config file. The path to this file can be specified with the `conffile` option. If this file does not exist, the default rules are taken from the config files `/etc/security/pam_env.conf` and `/etc/security/pam_env.conf.d/*.conf`. If the file `/etc/security/pam_env.conf` does not exist, the rules are taken from the files `%vendordir%/security/pam_env.conf`, `%vendordir%/security/pam_env.conf.d/*.conf` and `/etc/security/pam_env.conf.d/*.conf` in that order.

By default rules for (un)setting of variables are taken from the config file `/etc/security/pam_env.conf`. If this file does not exist `%vendordir%/security/pam_env.conf` is used. An alternate file can be specified with the `conffile` option, which overrules all other files.

By default rules for (un)setting of variables are taken from the config file `/etc/security/pam_env.conf`. An alternate file can be specified with the `conffile` option.

Environment variables can be defined in a file with simple `KEY=VAL` pairs on separate lines. The path to this file can be specified with the `envfile` option. If this file has not been defined, the settings are read from the files `/etc/security/environment` and `/etc/security/environment.d/*`. If the file `/etc/environment` does not exist, the settings are read from the files `%vendordir%/environment`, `%vendordir%/environment.d/*` and `/etc/environment.d/*` in that order. And last but not least, with the `readenv` option this mechanism can be completely disabled.

Second a file (`/etc/environment` by default) with simple `KEY=VAL` pairs on separate lines will be read. If this file does not exist, `%vendordir%/etc/environment` is used. With the `envfile` option an alternate file can be specified, which overrules all other files. And with the `readenv` option this can be completely disabled.

Second a file (`/etc/environment` by default) with simple `KEY=VAL` pairs on separate lines will be read. With the `envfile` option an alternate file can be specified. And with the `readenv` option this can be completely disabled.

Third it will read a user configuration file (`$HOME/.pam_environment` by default). The default file can be changed with the `user_envfile` option and it can be turned on and off with the `user_readenv` option.

Since setting of PAM environment variables can have side effects to other modules, this module should be the last one on the stack.



## 6.5.2. DESCRIPTION

The `%vendordir%/security/pam_env.conf` and `/etc/security/pam_env.conf` files specify the environment variables to be set, unset or modified by `pam_env(8)`.

When someone logs in, these files are read and the environment variables are set according.

The `/etc/security/pam_env.conf` file specifies the environment variables to be set, unset or modified by `pam_env(8)`. When someone logs in, this file is read and the environment variables are set according.

Each line starts with the variable name, there are then two possible options for each variable `DEFAULT` and `OVERRIDE`. `DEFAULT` allows an administrator to set the value of the variable to some default value, if none is supplied then the empty string is assumed. The `OVERRIDE` option tells `pam_env` that it should enter in its value (overriding the default value) if there is one to use. When `OVERRIDE` is not used, `""` is assumed and no override will be done.

```
VARIABLE [DEFAULT=[value]] [OVERRIDE=[value]]
```

(Possibly non-existent) environment variables may be used in values using the `{string}` syntax and (possibly non-existent) `PAM_ITEMS` as well as `HOME` and `SHELL` may be used in values using the `@{string}` syntax. Both the `$` and `@` characters can be backslash escaped to be used as literal values values can be delimited with `""`, escaped `"` not supported. Note that many environment variables that you would like to use may not be set by the time the module is called. For example, `${HOME}` is used below several times, but many PAM applications don't make it available by the time you need it. The special variables `@{HOME}` and `@{SHELL}` are expanded to the values for the user from his `passwd` entry.

The `"#"` character at start of line (no space at front) can be used to mark this line as a comment line.

The `%vendordir%/environment` and `/etc/environment` files specify the environment variables to be set. These files must consist of simple `NAME=VALUE` pairs on separate lines. The `pam_env(8)` module will read these files after the `pam_env.conf` file.

The `/etc/environment` file specifies the environment variables to be set. The file must consist of simple `NAME=VALUE` pairs on separate lines.

The `pam_env(8)` module will read the file after the `pam_env.conf` file.

## 6.5.3. OPTIONS

```
conffile=/path/to/pam_env.conf
```

Indicate an alternative `pam_env.conf` style configuration file to override the default. This can be useful when different services need different environments.

`debug`

A lot of debug information is printed with `syslog(3)`.

`envfile=/path/to/environment`

Indicate an alternative environment file to override the default. The syntax are simple `KEY=VAL` pairs on separate lines. The `export` instruction can be specified for bash compatibility, but will be ignored. This can be useful when different services need different environments.

`readenv=0|1`

Turns on or off the reading of the file specified by `envfile` (0 is off, 1 is on). By default this option is on.

`user_envfile=filename`

Indicate an alternative `.pam_environment` file to override the default. The syntax is the same as for `/etc/security/pam_env.conf`. The filename is relative to the user home directory. This can be useful when different services need different environments.

`user_readenv=0|1`

Turns on or off the reading of the user specific environment file. 0 is off, 1 is on. By default this option is off as user supplied environment variables in the PAM environment could affect behavior of subsequent modules in the stack without the consent of the system administrator.

Due to problematic security this functionality is deprecated since the 1.5.0 version and will be removed completely at some point in the future.

#### 6.5.4. MODULE TYPES PROVIDED

The auth and session module types are provided.

#### 6.5.5. RETURN VALUES

`PAM_ABORT`

Not all relevant data or options could be gotten.

## PAM\_BUF\_ERR

Memory buffer error.

## PAM\_IGNORE

No pam\_env.conf and environment file was found.

## PAM\_SUCCESS

Environment variables were set.

### 6.5.6. FILES

%vendordir%/security/pam\_env.conf, /etc/security/pam\_env.conf

Default configuration  
file

%vendordir%/environment, /etc/environment

Default environment file

\$HOME/.pam\_environment

User specific environment file

### 6.5.7. EXAMPLES

These are some example lines which might be specified in /etc/security/  
pam\_env.conf.

Set the REMOTEHOST variable for any hosts that are remote, default to  
"localhost" rather than not being set at all

```
REMOTEHOST    DEFAULT=localhost OVERRIDE=@{PAM_RHOST}
```

Set the DISPLAY variable if it seems reasonable

```
DISPLAY       DEFAULT=${REMOTEHOST}:0.0 OVERRIDE=${DISPLAY}
```

Now some simple variables

```
PAGER         DEFAULT=less  
MANPAGER      DEFAULT=less
```

```
LESS      DEFAULT="M q e h15 z23 b80"
NNTPSERVER  DEFAULT=localhost
PATH      DEFAULT=${HOME}/bin:/usr/local/bin:/bin\
:/usr/bin:/usr/local/bin/X11:/usr/bin/X11
XDG_DATA_HOME  DEFAULT=@{HOME}/share/
```

Silly examples of escaped variables, just to show how they work.

```
DOLLAR    DEFAULT=\$
DOLLARDOLLAR
DEFAULT=  OVERRIDE=\${DOLLAR}
DOLLARPLUS  DEFAULT=\${REMOTEHOST}\${REMOTEHOST}
ATSIGN    DEFAULT=""    OVERRIDE=\@
```

### 6.5.8. AUTHOR

pam\_env was written by Dave Kinchlea <kinch@kinch.ark.com>.

### 6.6. pam\_exec - call an external command

```
pam_exec.so [ debug ] [ expose_authtok ] [ seteuid ] [ quiet ] [ quiet_log ] [
stdout ] [ log=file ] [ type=type ] command [ ... ]
```

#### 6.6.1. DESCRIPTION

pam\_exec is a PAM module that can be used to run an external command.

The child's environment is set to the current PAM environment list, as returned by pam\_getenvlist(3). In addition, the following PAM items are exported as environment variables: PAM\_RHOST, PAM\_RUSER, PAM\_SERVICE, PAM\_TTY, PAM\_USER and PAM\_TYPE, which contains one of the module types: account, auth, password, open\_session and close\_session.

Commands called by pam\_exec need to be aware of that the user can have control over the environment.

#### 6.6.2. OPTIONS

debug

Print debug information.

expose\_authtok

During authentication the calling command can read the password from stdin (3). Only first PAM\_MAX\_RESP\_SIZE bytes of a password are provided to the

command.

log=file

The output of the command is appended to file

type=type

Only run the command if the module type matches the given type.

stdout

Per default the output of the executed command is written to /dev/null.

With this option, the stdout output of the executed command is redirected to the calling application. It's in the responsibility of this application what happens with the output. The log option is ignored.

quiet

Per default pam\_exec.so will echo the exit status of the external command if it fails. Specifying this option will suppress the message.

quiet\_log

Per default pam\_exec.so will log the exit status of the external command if it fails. Specifying this option will suppress the log message.

seteuid

Per default pam\_exec.so will execute the external command with the real user ID of the calling process. Specifying this option means the command is run with the effective user ID.

### 6.6.3. MODULE TYPES PROVIDED

All module types (auth, account, password and session) are provided.

### 6.6.4. RETURN VALUES

PAM\_SUCCESS

The external command was run successfully.

PAM\_BUF\_ERR

Memory buffer error.

## PAM\_CONV\_ERR

The conversation method supplied by the application failed to obtain the username.

## PAM\_INCOMPLETE

The conversation method supplied by the application returned PAM\_CONV\_AGAIN.

## PAM\_SERVICE\_ERR

No argument or a wrong number of arguments were given.

## PAM\_SYSTEM\_ERR

A system error occurred or the command to execute failed.

## PAM\_IGNORE

pam\_setcred was called, which does not execute the command. Or, the value given for the type= parameter did not match the module type.

### 6.6.5. EXAMPLES

Add the following line to /etc/pam.d/passwd to rebuild the NIS database after each local password change:

```
password optional pam_exec.so seteuid /usr/bin/make -C /var/yp
```

This will execute the command

```
make -C /var/yp
```

with effective user ID.

### 6.6.6. AUTHOR

pam\_exec was written by Thorsten Kukuk <kukuk@thkukuk.de> and Josh Triplett <josh@joshtriplett.org>.

### 6.7. pam\_faildelay - change the delay on failure per-application

```
pam_faildelay.so [ debug ] [ delay=microseconds ]
```

#### 6.7.1. DESCRIPTION

pam\_faildelay is a PAM module that can be used to set the delay on failure per-application.

If no delay is given, pam\_faildelay will use the value of FAIL\_DELAY from /etc/login.defs.

### 6.7.2. OPTIONS

debug

Turns on debugging messages sent to syslog.

delay=N

Set the delay on failure to N microseconds.

### 6.7.3. MODULE TYPES PROVIDED

Only the auth module type is provided.

### 6.7.4. RETURN VALUES

PAM\_IGNORE

Delay was successful adjusted.

PAM\_SYSTEM\_ERR

The specified delay was not valid.

### 6.7.5. EXAMPLES

The following example will set the delay on failure to 10 seconds:

```
auth
optional pam_faildelay.so delay=10000000
```

### 6.7.6. AUTHOR

pam\_faildelay was written by Darren Tucker <dtucker@zip.com.au>.

6.8. pam\_faillock - temporarily locking access based on failed authentication attempts during an interval

```
auth ... pam_faillock.so { preauth|authfail|authsucc } [ conf=/path/to/
config-file ] [ dir=/path/to/tally-directory ] [ even_deny_root ] [ deny=n ] [
fail_interval=n ] [ unlock_time=n ] [ root_unlock_time=n ] [ admin_group=name ]
```

[ audit ] [ silent ] [ no\_log\_info ]

account ... pam\_faillock.so [ dir=/path/to/tally-directory ] [ no\_log\_info ]

### 6.8.1. DESCRIPTION

This module maintains a list of failed authentication attempts per user during a specified interval and locks the account in case there were more than deny consecutive failed authentications.

Normally, failed attempts to authenticate root will not cause the root account to become blocked, to prevent denial-of-service: if your users aren't given shell accounts and root may only login via su or at the machine console (not telnet/rsh, etc), this is safe.

### 6.8.2. OPTIONS

{preauth|authfail|authsucc}

This argument must be set accordingly to the position of this module instance in the PAM stack.

The preauth argument must be used when the module is called before the modules which ask for the user credentials such as the password. The module just examines whether the user should be blocked from accessing the service in case there were anomalous number of failed consecutive authentication attempts recently. This call is optional if authsucc is used.

The authfail argument must be used when the module is called after the modules which determine the authentication outcome, failed. Unless the user is already blocked due to previous authentication failures, the module will record the failure into the appropriate user tally file.

The authsucc argument must be used when the module is called after the modules which determine the authentication outcome, succeeded. Unless the user is already blocked due to previous authentication failures, the module will then clear the record of the failures in the respective user tally file. Otherwise it will return authentication error. If this call is not done, the pam\_faillock will not distinguish between consecutive and non-consecutive failed authentication attempts. The preauth call must be used in such case. Due to complications in the way the PAM stack can be configured it is also possible to call pam\_faillock as an account module. In such configuration the module must be also called in the preauth stage.

conf=/path/to/config-file



Use another configuration file instead of the default `/etc/security/faillock.conf`.

Use another configuration file instead of the default which is to use the file `/etc/security/faillock.conf` or, if that one is not present, the file `%vendordir%/security/faillock.conf`.

The options for configuring the module behavior are described in the `faillock.conf(5)` manual page. The options specified on the module command line override the values from the configuration file.

### 6.8.3. MODULE TYPES PROVIDED

The auth and account module types are provided.

### 6.8.4. RETURN VALUES

#### PAM\_AUTH\_ERR

An invalid option was given, the module was not able to retrieve the user name, no valid counter file was found, or too many failed logins.

#### PAM\_BUF\_ERR

Memory buffer error.

#### PAM\_CONV\_ERR

The conversation method supplied by the application failed to obtain the username.

#### PAM\_INCOMPLETE

The conversation method supplied by the application returned `PAM_CONV_AGAIN`.

#### PAM\_SUCCESS

Everything was successful.

#### PAM\_IGNORE

User not present in passwd database.

### 6.8.5. EXAMPLES

Here are two possible configuration examples for `/etc/pam.d/login`. They make

pam\_faillock to lock the account after 4 consecutive failed logins during the default interval of 15 minutes. Root account will be locked as well. The accounts will be automatically unlocked after 20 minutes.

In the first example the module is called only in the auth phase and the module does not print any information about the account being blocked by pam\_faillock. The preauth call can be added to tell users that their logins are blocked by the module and also to abort the authentication without even asking for password in such case.

/etc/security/faillock.conf file example:

```
deny=4
unlock_time=1200
silent
```

/etc/pam.d/config file example:

```
auth    required    pam_securetty.so
auth    required    pam_env.so
auth    required    pam_nologin.so
# optionally call: auth requisite pam_faillock.so preauth
# to display the message about account being locked
auth    [success=1 default=bad] pam_unix.so
auth    [default=die] pam_faillock.so authfail
auth    sufficient  pam_faillock.so authsucc
auth    required    pam_deny.so
account required    pam_unix.so
password required   pam_unix.so
shadow
session required    pam_selinux.so close
session required    pam_loginuid.so
session required    pam_unix.so
session required    pam_selinux.so open
```

In the second example the module is called both in the auth and account phases and the module informs the authenticating user when the account is locked if silent option is not specified in the faillock.conf.

```
auth    required    pam_securetty.so
auth    required    pam_env.so
auth    required    pam_nologin.so
auth    required    pam_faillock.so preauth
# optionally use requisite above if you do not want to prompt for the password
# on locked accounts
```

```

auth    sufficient    pam_unix.so
auth    [default=die]  pam_faillock.so authfail
auth    required     pam_deny.so
account required     pam_faillock.so
# if you drop the above call to pam_faillock.so the lock will be done also
# on non-consecutive authentication failures
account required     pam_unix.so
password required    pam_unix.so
shadow
session required    pam_selinux.so close
session required    pam_loginuid.so
session required    pam_unix.so
session required    pam_selinux.so open

```

### 6.8.6. AUTHOR

pam\_faillock was written by Tomas Mraz.

### 6.9. pam\_filter - filter module

```
pam_filter.so [ debug ] [ new_term ] [ non_term ] run1|run2 filter [ ... ]
```

#### 6.9.1. DESCRIPTION

This module is intended to be a platform for providing access to all of the input/output that passes between the user and the application. It is only suitable for tty-based and (stdin/stdout) applications.

To function this module requires filters to be installed on the system. The single filter provided with the module simply transposes upper and lower case letters in the input and output streams. (This can be very annoying and is not kind to termcap based editors).

Each component of the module has the potential to invoke the desired filter. The filter is always `execv(2)` with the privilege of the calling application and not that of the user. For this reason it cannot usually be killed by the user without closing their session.

#### 6.9.2. OPTIONS

debug

Print debug information.

new\_term

The default action of the filter is to set the PAM\_TTY item to indicate the terminal that the user is using to connect to the application. This argument indicates that the filter should set PAM\_TTY to the filtered pseudo-terminal.

non\_term

don't try to set the PAM\_TTY item.

runX

In order that the module can invoke a filter it should know when to invoke it. This argument is required to tell the filter when to do this.

Permitted values for X are 1 and 2. These indicate the precise time that the filter is to be run. To understand this concept it will be useful to have read the pam(3) manual page. Basically, for each management group there are up to two ways of calling the module's functions. In the case of the authentication and session components there are actually two separate functions. For the case of authentication, these functions are pam\_authenticate(3) and pam\_setcred(3), here run1 means run the filter from the pam\_authenticate function and run2 means run the filter from pam\_setcred. In the case of the session modules, run1 implies that the filter is invoked at the pam\_open\_session(3) stage, and run2 for pam\_close\_session(3).

For the case of the account component. Either run1 or run2 may be used.

For the case of the password component, run1 is used to indicate that the filter is run on the first occasion of pam\_chauthtok(3) (the PAM\_PRELIM\_CHECK phase) and run2 is used to indicate that the filter is run on the second occasion (the PAM\_UPDATE\_AUTHTOK phase).

filter

The full pathname of the filter to be run and any command line arguments that the filter might expect.

### 6.9.3. MODULE TYPES PROVIDED

All module types (auth, account, password and session) are provided.

### 6.9.4. RETURN VALUES

PAM\_SUCCESS

The new filter was set successfully.

## PAM\_ABORT

Critical error, immediate abort.

### 6.9.5. EXAMPLES

Add the following line to `/etc/pam.d/login` to see how to configure login to transpose upper and lower case letters once the user has logged in:

```
session required pam_filter.so run1 /lib/security/pam_filter/upperLOWER
```

### 6.9.6. AUTHOR

`pam_filter` was written by Andrew G. Morgan <morgan@kernel.org>.

### 6.10. pam\_ftp - module for anonymous access

```
pam_ftp.so [ debug ] [ ignore ] [ users=XXX,YYY, ...]
```

#### 6.10.1. DESCRIPTION

`pam_ftp` is a PAM module which provides a pluggable anonymous ftp mode of access.

This module intercepts the user's name and password. If the name is `ftp` or `anonymous`, the user's password is broken up at the `@` delimiter into a `PAM_RUSER` and a `PAM_RHOST` part; these pam-items being set accordingly. The username (`PAM_USER`) is set to `ftp`. In this case the module succeeds. Alternatively, the module sets the `PAM_AUTHTOK` item with the entered password and fails.

This module is not safe and easily spoofable.

#### 6.10.2. OPTIONS

`debug`

Print debug information.

`ignore`

Pay no attention to the email address of the user (if supplied).

`ftp=XXX,YYY,...`

Instead of ftp or anonymous, provide anonymous login to the comma separated list of users: XXX,YYY,.... Should the applicant enter one of these usernames the returned username is set to the first in the list: XXX.

### 6.10.3. MODULE TYPES PROVIDED

Only the auth module type is provided.

### 6.10.4. RETURN VALUES

#### PAM\_SUCCESS

The authentication was successful.

#### PAM\_USER\_UNKNOWN

User not known.

### 6.10.5. EXAMPLES

Add the following line to /etc/pam.d/ftpd to handle ftp style anonymous login:

```
#
# ftpd; add ftp-specifics. These lines enable anonymous ftp over
# standard UN*X access (the listfile entry blocks access to
# users listed in /etc/ftpusers)
#
auth sufficient pam_ftp.so
auth required pam_unix.so use_first_pass
auth required pam_listfile.so
\
    onerr=succeed item=user sense=deny file=/etc/ftpusers
```

### 6.10.6. AUTHOR

pam\_ftp was written by Andrew G. Morgan <morgan@kernel.org>.

### 6.11. pam\_group - module to modify group access

pam\_group.so

#### 6.11.1. DESCRIPTION

The pam\_group PAM module does not authenticate the user, but instead it grants group memberships (in the credential setting phase of the authentication module) to the user. Such memberships are based on the service they are applying for.

By default rules for group memberships are taken from config file `/etc/security/group.conf`.

If `/etc/security/group.conf` does not exist, `%vendordir%/security/group.conf` is used.

This module's usefulness relies on the file-systems accessible to the user. The point being that once granted the membership of a group, the user may attempt to create a setgid binary with a restricted group ownership. Later, when the user is not given membership to this group, they can recover group membership with the precompiled binary.

The reason that the file-systems that the user has access to are so significant, is the fact that when a system is mounted nosuid the user is unable to create or execute such a binary file. For this module to provide any level of security, all file-systems that the user has write access to should be mounted nosuid.

The `pam_group` module functions in parallel with the `/etc/group` file. If the user is granted any groups based on the behavior of this module, they are granted in addition to those entries `/etc/group` (or equivalent).

#### 6.11.2. DESCRIPTION

The `pam_group` PAM module does not authenticate the user, but instead it grants group memberships (in the credential setting phase of the authentication module) to the user. Such memberships are based on the service they are applying for.

For this module to function correctly there must be a correctly formatted `/etc/security/group.conf` file present. White spaces are ignored and lines may be extended with `\` (escaped newlines). Text following a `#` is ignored to the end of the line.

The syntax of the lines is as follows:

```
services;tty;users;times;groups
```

The first field, the `services` field, is a logic list of PAM service names that the rule applies to.

The second field, the `tty` field, is a logic list of terminal names that this rule applies to.

The third field, the `users` field, is a logic list of users, or a UNIX group, or a netgroup of users to whom this rule applies. Group names are preceded by a `'%` symbol, while netgroup names are preceded by a `'@'` symbol.

A logic list namely means individual tokens that are optionally prefixed with '!' (logical not) and separated with '&' (logical and) and '|' (logical or).

For these items the simple wildcard '\*' may be used only once. With UNIX groups or netgroups no wildcards or logic operators are allowed.

The times field is used to indicate "when" these groups are to be given to the user. The format here is a logic list of day/time-range entries. The days are specified by

a sequence of two character entries, MoTuSa for example is Monday Tuesday and Saturday. Note that repeated days are unset MoMo = no day, and MoWk = all weekdays bar Monday. The two character combinations accepted are Mo Tu We Th Fr Sa Su Wk Wd Al, the last two being week-end days and all 7 days of the week respectively. As a final example, AlFr means all days except Friday.

Each day/time-range can be prefixed with a '!' to indicate "anything but". The time-range part is two 24-hour times HHMM, separated by a hyphen, indicating the start and finish time (if the finish time is smaller than the start time it is deemed to apply on the following day).

The groups field is a comma or space separated list of groups that the user inherits membership of. These groups are added if the previous fields are satisfied by the user's request.

For a rule to be active, ALL of service+ttys+users must be satisfied by the applying process.

### 6.11.3. OPTIONS

This module does not recognise any options.

### 6.11.4.

#### MODULE TYPES PROVIDED

Only the auth module type is provided.

### 6.11.5. RETURN VALUES

#### PAM\_SUCCESS

group membership was granted.

#### PAM\_ABORT

Not all relevant data could be gotten.

#### PAM\_BUF\_ERR



Memory buffer error.

#### PAM\_CRED\_ERR

Group membership was not granted.

#### PAM\_IGNORE

pam\_sm\_authenticate was called which does nothing.

#### PAM\_USER\_UNKNOWN

The user is not known to the system.

#### 6.11.6. FILES

/etc/security/group.conf

Default configuration file

#### 6.11.7. EXAMPLES

These are some example lines which might be specified in /etc/security/group.conf.

Running 'xsh' on tty\* (any ttyXXX device), the user 'us' is given access to the floppy (through membership of the floppy group)

```
xsh;tty*&!ttyp*;us;A10000-2400;floppy
```

Running 'xsh' on tty\* (any ttyXXX device), the users 'sword', 'pike' and 'shield' are given access to games (through membership of the floppy group) after work hours.

```
xsh; tty* ;sword|pike|shield;!Wk0900-1800;games, sound  
xsh; tty* ;*;A10900-1800;floppy
```

Any

member of the group 'admin' running 'xsh' on tty\*, is granted access (at any time) to the group 'plugdev'

```
xsh; tty* ;%admin;A10000-2400;plugdev
```

#### 6.11.8. AUTHORS

pam\_group was written by Andrew G. Morgan <morgan@kernel.org>.

## 6.12. pam\_issue - add issue file to user prompt

pam\_issue.so [ noesc ] [ issue=issue-file-name ]

### 6.12.1. DESCRIPTION

pam\_issue is a PAM module to prepend an issue file to the username prompt. It also by default parses escape codes in the issue file similar to some common getty's (using \x format).

Recognized escapes:

\d

current day

\l

name of this tty

\m

machine architecture (uname -m)

\n

machine's network node hostname (uname -n)

\o

domain name of this system

\r

release number of operating system (uname -r)

\t

current time

\s

operating system name (uname -s)

\u

number of users currently logged in

\U

same as \u except it is suffixed with "user" or "users" (eg. "1 user" or "10 users")

\v

operating system version and build date (uname -v)

#### 6.12.2. OPTIONS

noesc

Turns off escape code parsing.

issue=issue-file-name

The file to output if not using the default.

#### 6.12.3. MODULE TYPES PROVIDED

Only the auth module type is provided.

#### 6.12.4. RETURN VALUES

PAM\_BUF\_ERR

Memory buffer error.

PAM\_IGNORE

The prompt was already changed.

PAM\_SERVICE\_ERR

A service module error occurred.

PAM\_SUCCESS

The new prompt was set successfully.

#### 6.12.5. EXAMPLES

Add the following line to /etc/pam.d/login to set the user specific issue at login:

auth optional pam\_issue.so issue=/etc/issue

#### 6.12.6. AUTHOR

pam\_issue was written by Ben Collins <bcollins@debian.org>.

#### 6.13. pam\_keyinit - display the keyinit file

pam\_keyinit.so [ debug ] [ force ] [ revoke ]

##### 6.13.1. DESCRIPTION

The pam\_keyinit PAM module ensures that the invoking process has a session keyring other than the user default session keyring.

The module checks to see if the process's session keyring is the user-session-keyring(7), and, if it is, creates a new session-keyring(7) with which to replace it. If a new session keyring is created, it will install a link to the user-keyring(7) in the session keyring so that keys common to the user will be automatically accessible through it. The session keyring of the invoking process will thenceforth be inherited by all its children unless they override it.

In order to allow other PAM modules to attach tokens to the keyring, this module provides both an auth (limited to pam\_setcred(3)) and a session component. The session keyring is created in the module called. Moreover this module should be included as early as possible in a PAM configuration.

This module is intended primarily for use by login processes. Be aware that after the session keyring has been replaced, the old session keyring and the keys it contains will no longer be accessible.

This module should not, generally, be invoked by programs like su, since it is usually desirable for the key set to percolate through to the alternate context. The keys have their own permissions system to manage this.

The keyutils package is used to manipulate keys more directly. This can be obtained from:

Keyutils

##### 6.13.2. OPTIONS

debug

Log debug information with syslog(3).

force

Causes the session keyring of the invoking process to be replaced unconditionally.

revoke

Causes the session keyring of the invoking process to be revoked when the invoking process exits if the session keyring was created for this process in the first place.

### 6.13.3. MODULE TYPES PROVIDED

Only the session module type is provided.

### 6.13.4. RETURN VALUES

PAM\_SUCCESS

This module will usually return this value

PAM\_AUTH\_ERR

Authentication failure.

PAM\_BUF\_ERR

Memory buffer error.

PAM\_IGNORE

The return value should be ignored by PAM dispatch.

PAM\_SERVICE\_ERR

Cannot determine the user name.

PAM\_SESSION\_ERR

This module will return this value if its arguments are invalid or if a system error such as ENOMEM occurs.

PAM\_USER\_UNKNOWN

User not known.

### 6.13.5. EXAMPLES

Add this line to your login entries to start each login session with its own session keyring:

```
session required pam_keyinit.so
```

This will prevent keys from one session leaking into another session for the same user.

### 6.13.6. AUTHOR

pam\_keyinit was written by David Howells, <dhowells@redhat.com>.

### 6.14. pam\_lastlog - display date of last login

```
pam_lastlog.so [ debug ] [ silent ] [ never ] [ nodate ] [ nohost ] [ noterm ]  
[ nowtmp ] [ nouptdate ] [ showfailed ] [ inactive=<days> ] [ unlimited ]
```

#### 6.14.1. DESCRIPTION

pam\_lastlog is a PAM module to display a line of information about the last login of the user. In addition, the module maintains the `/var/log/lastlog` file.

Some applications may perform this function themselves. In such cases, this module is not necessary.

The module checks `LASTLOG_UID_MAX` option in `/etc/login.defs` and does not update

or display last login records for users with UID higher than its value. If the option is not present or its value is invalid, no user ID limit is applied.

If the module is called in the auth or account phase, the accounts that were not used recently enough will be disallowed to log in. The check is not performed for the root account so the root is never locked out. It is also not performed for users with UID higher than the `LASTLOG_UID_MAX` value.

#### 6.14.2. OPTIONS

debug

Print debug information.

silent

Don't inform the user about any previous login, just update the `/var/log/lastlog` file. This option does not affect display of bad login attempts.

never

If the `/var/log/lastlog` file does not contain any old entries for the user, indicate that the user has never previously logged in with a welcome message.

nodate

Don't display the date of the last login.

noterm

Don't display the terminal name on which the last login was attempted.

nohost

Don't indicate from which host the last login was attempted.

nowtmp

Don't update the `wtmp` entry.

noupdate

Don't update any file.

showfailed

Display number of failed login attempts and the date of the last failed attempt from `btmp`. The date is not displayed when `nodate` is specified.

inactive=<days>

This option is specific for the `auth` or `account` phase. It specifies the number of days after the last login of the user when the user will be locked out by the module. The default value is 90.

unlimited

If the `fsize` limit is set, this option can be used to override it, preventing failures on systems with large UID values that lead `lastlog` to become a huge sparse file.

### 6.14.3. MODULE TYPES PROVIDED

The auth and account module type allows one to lock out users who did not login recently enough. The session module type is provided for displaying the information about the last login and/or updating the lastlog and wtmp files.

#### 6.14.4.

##### RETURN VALUES

##### PAM\_SUCCESS

Everything was successful.

##### PAM\_SERVICE\_ERR

Internal service module error.

##### PAM\_USER\_UNKNOWN

User not known.

##### PAM\_AUTH\_ERR

User locked out in the auth or account phase due to inactivity.

##### PAM\_IGNORE

There was an error during reading the lastlog file in the auth or account phase and thus inactivity of the user cannot be determined.

#### 6.14.5. EXAMPLES

Add the following line to `/etc/pam.d/login` to display the last login time of a user:

```
session required pam_lastlog.so nowtmp
```

To reject the user if he did not login during the previous 50 days the following line can be used:

```
auth required pam_lastlog.so inactive=50
```

#### 6.14.6. AUTHOR

`pam_lastlog` was written by Andrew G. Morgan <morgan@kernel.org>.

Inactive account lock out added by Tomáš Mráz <tm@t8m.info>.



## 6.15. pam\_limits - limit resources

```
pam_limits.so [ conf=/path/to/limits.conf ] [ debug ] [ set_all ] [ utmp_early ] [ noaudit ]
```

### 6.15.1. DESCRIPTION

The

pam\_limits PAM module sets limits on the system resources that can be obtained in a user-session. Users of uid=0 are affected by this limits, too.

By default limits are taken from the /etc/security/limits.conf config file. Then individual \*.conf files from the /etc/security/limits.d/ directory are read. The files are parsed one after another in the order of "C" locale. The effect of the individual files is the same as if all the files were concatenated together in the order of parsing. If a config file is explicitly specified with a module option then the files in the above directory are not parsed.

By default limits are taken from the /etc/security/limits.conf config file or, if that one is not present, the file %vendordir%/security/limits.conf. Then individual \*.conf files from the /etc/security/limits.d/ and %vendordir%/security/limits.d directories are read. If /etc/security/limits.d/@filename@.conf exists, then %vendordir%/security/limits.d/@filename@.conf will not be used.

All limits.d/\*.conf files are sorted by their @filename@.conf in lexicographic order regardless of which of the directories they reside in. The effect of the individual files is the same as if all the files were concatenated together in the order of parsing. If a config file is explicitly specified with the config option the files in the above directories are not parsed.

The module must not be called by a multithreaded application.

If Linux PAM is compiled with audit support the module will report when it denies access based on limit of maximum number of concurrent login sessions.

### 6.15.2. DESCRIPTION

The pam\_limits.so module applies ulimit limits, nice priority and number of simultaneous login sessions limit to user login sessions. This description of the configuration file syntax applies to the /etc/security/limits.conf file and \*.conf files in the /etc/security/limits.d directory.

The syntax of the lines is as follows:

```
<domain> <type> <item> <value>
```

The fields listed above should be filled as follows:

<domain>

a username

a groupname, with @group syntax. This should not be confused with netgroups.

the wildcard \*, for default entry.

the wildcard %, for maxlogins limit only, can also be used with %group syntax. If the % wildcard is used alone it is identical to using \* with maxsyslogins limit. With a group specified after % it limits the total number of logins of all users that are member of the group.

an uid range specified as <min\_uid>:<max\_uid>. If min\_uid is omitted, the match is exact for the max\_uid. If max\_uid is omitted, all uids greater than or equal min\_uid match.

a gid range specified as @<min\_gid>:<max\_gid>. If min\_gid is omitted, the match is exact for the max\_gid. If max\_gid is omitted, all gids greater than or equal min\_gid match. For the exact match all groups including the user's supplementary groups are examined. For the range matches only the user's primary group is examined.

a gid specified as %:<gid> applicable to maxlogins limit only. It limits the total number of logins of all users that are member of the group with the specified gid.

<type>

hard

for enforcing hard resource limits. These limits are set by the superuser and enforced by the Kernel. The user cannot raise his requirement of system resources above such values.

soft

for enforcing soft resource limits. These limits are ones that the user can move up or down within the permitted range by any pre-existing hard limits. The values specified with this token can be thought of as default values, for normal system usage.

-

for enforcing both soft and hard resource limits together.

Note, if you specify a type of '-' but neglect to supply the item and value fields then the module will never enforce any limits on the specified user/group etc. .

<item>

core

limits the core file size (KB)

data

maximum data size (KB)

fsize

maximum filesize (KB)

memlock

maximum locked-in-memory address space (KB)

nofile

maximum number of open file descriptors

rss

maximum resident set size (KB) (Ignored in Linux 2.4.30 and higher)

stack

maximum stack size (KB)

cpu

maximum CPU time (minutes)

nproc

maximum number of processes

as

address space limit (KB)

maxlogins

maximum number of logins for this user (this limit does not apply to user with uid=0)

maxsyslogins

maximum number of all logins on system; user is not allowed to log-in if total number of all user logins is greater than specified number (this limit does not apply to user with uid=0)

nonewprivs

value of 0 or 1; if set to 1 disables acquiring new privileges by invoking `prctl(PR_SET_NO_NEW_PRIVS)`

priority

the priority to run user process with (negative values boost process priority)

locks

maximum locked files (Linux 2.4 and higher)

sigpending

maximum number of pending signals (Linux 2.6 and higher)

msgqueue

maximum memory used by POSIX message queues (bytes) (Linux 2.6 and higher)

nice

maximum nice priority allowed to raise to (Linux 2.6.12 and higher)  
values: [-20,19]

rtprio

maximum realtime priority allowed for non-privileged processes (Linux 2.6.12 and higher)

All items support the values -1, unlimited or infinity indicating no limit,

except for priority, nice, and nonewprivs. If nofile is to be set to one of these values, it will be set to the contents of /proc/sys/fs/nr\_open instead (see setrlimit(3)).

If a hard limit or soft limit of a resource is set to a valid value, but outside of the supported range of the local system, the system may reject the new limit or unexpected behavior may occur. If the control value required is used, the module will reject the login if a limit could not be set.

In general, individual limits have priority over group limits, so if you impose no limits for admin group, but one of the members in this group have a limits line, the user will have its limits set according to this line.

Also, please note that all limit settings are set per login. They are not global, nor are they permanent; existing only for the duration of the session. One exception is the maxlogin option, this one is system wide. But there is a race, concurrent logins at the same time will not always be detect as such but only counted as one.

In the limits configuration file, the '#' character introduces a comment - after which the rest of the line is ignored.

The pam\_limits module does report configuration problems found in its configuration file and errors via syslog(3).

### 6.15.3. OPTIONS

`conf=/path/to/limits.conf`

Indicate an alternative limits.conf style configuration file to override the default.

`debug`

Print debug information.

`set_all`

Set the limits for which no value is specified in the configuration file to the one from the process with the PID 1. Please note that if the init process is systemd these limits will not be the kernel default limits and this option should not be used.

`utmp_early`

Some broken applications actually allocate a utmp entry for the user before the user is admitted to the system. If some of the services you are

configuring PAM for do this, you can selectively use this module argument to compensate for this behavior and at the same time maintain system-wide consistency with a single limits.conf file.

noaudit

Do not report exceeded maximum logins count to the audit subsystem.

#### 6.15.4. MODULE TYPES PROVIDED

Only the session module type is provided.

#### 6.15.5. RETURN VALUES

PAM\_ABORT

Cannot get current limits.

PAM\_IGNORE

No limits found for this user.

PAM\_PERM\_DENIED

New limits could not be set.

PAM\_SERVICE\_ERR

Cannot read config file.

PAM\_SESSION\_ERR

Error recovering account name.

PAM\_SUCCESS

Limits were changed.

PAM\_USER\_UNKNOWN

The user is not known to the system.

#### 6.15.6. FILES

/etc/security/limits.conf

Default configuration file

`%vendordir%/security/limits.conf`

Default configuration file if `/etc/security/limits.conf` does not exist.

### 6.15.7. EXAMPLES

These are some example lines which might be specified in `/etc/security/limits.conf`.

```
*      soft  core      0
*      hard  nofile    512
@student  hard  nproc     20
@faculty  soft  nproc     20
@faculty  hard  nproc     50
ftp       hard  nproc     0
@student  -    maxlogins  4
@student  -    nonewprivs 1
:123     hard  cpu
        5000
@500:    soft  cpu       10000
600:700  hard  locks     10
```

### 6.15.8. AUTHORS

`pam_limits` was initially written by Cristian Gafton <gafton@redhat.com>

### 6.16. `pam_listfile` - deny or allow services based on an arbitrary file

```
pam_listfile.so item=[tty|user|rhost|ruser|group|shell] sense=[allow|deny] file
=/path/filename onerr=[succeed|fail] [ apply=[user|@group] ] [ quiet ]
```

#### 6.16.1. DESCRIPTION

`pam_listfile` is a PAM module which provides a way to deny or allow services based on an arbitrary file.

The module gets the item of the type specified -- `user` specifies the username, `PAM_USER`; `tty` specifies the name of the terminal over which the request has been made, `PAM_TTY`; `rhost` specifies the name of the remote host (if any) from which the request was made, `PAM_RHOST`; and `ruser` specifies the name of the remote user (if available) who made the request, `PAM_RUSER` -- and looks for an instance of that item in the `file=filename`. `filename` contains one line per item listed. If the item is found, then if `sense=allow`, `PAM_SUCCESS` is returned, causing the authorization request to succeed; else if `sense=deny`, `PAM_AUTH_ERR` is returned, causing the authorization request to fail.

If an error is encountered (for instance, if filename does not exist, or a poorly-constructed argument is encountered), then if `onerr=succeed`, `PAM_SUCCESS` is returned, otherwise if `onerr=fail`, `PAM_AUTH_ERR` or `PAM_SERVICE_ERR` (as appropriate) will be returned.

An additional argument, `apply=`, can be used to restrict the application of the above to a specific user (`apply=username`) or a given group (`apply=@groupname`). This added restriction is only meaningful when used with the `tty`, `rhost` and `shell` items.

Besides this last one, all arguments should be specified; do not count on any default behavior.

No credentials are awarded by this module.

#### 6.16.2. OPTIONS

`item=[tty|user|rhost|ruser|group|shell]`

What is listed in the file and should be checked for.

`sense=[allow|deny]`

Action to take if found in file, if the item is NOT found in the file, then the opposite action is requested.

`file=/path/filename`

File containing one item per line. The file needs to be a plain file and not world writable.

`onerr=[succeed|fail]`

What to do if something weird happens like being unable to open the file.

`apply=[user|@group]`

Restrict the user class for which the restriction apply. Note that with `item=[user|ruser|group]` this does not make sense, but for `item=[tty|rhost|shell]` it have a meaning.

`quiet`

Do not treat service refusals or missing list files as errors that need to be logged.

#### 6.16.3. MODULE TYPES PROVIDED



All module types (auth, account, password and session) are provided.

#### 6.16.4. RETURN VALUES

##### PAM\_AUTH\_ERR

Authentication failure.

##### PAM\_BUF\_ERR

Memory buffer error.

##### PAM\_IGNORE

The rule does not apply to the apply option.

##### PAM\_SERVICE\_ERR

Error in service module.

##### PAM\_SUCCESS

Success.

#### 6.16.5.

##### EXAMPLES

Classic 'ftpdusers' authentication can be implemented with this entry in `/etc/pam.d/ftpd`:

```
#
# deny ftp-access to users listed in the /etc/ftpdusers file
#
auth required pam_listfile.so \
    onerr=succeed item=user sense=deny file=/etc/ftpdusers
```

Note, users listed in `/etc/ftpdusers` file are (counterintuitively) not allowed access to the ftp service.

To allow login access only for certain users, you can use a `/etc/pam.d/login` entry like this:

```
#
# permit login to users listed in /etc/loginusers
#
auth required pam_listfile.so \
    onerr=fail item=user sense=allow file=/etc/loginusers
```

For this example to work, all users who are allowed to use the login service should be listed in the file `/etc/loginusers`. Unless you are explicitly trying to lock out root, make sure that when you do this, you leave a way for root to log in, either by listing root in `/etc/loginusers`, or by listing a user who is able to su to the root account.

#### 6.16.6. AUTHOR

`pam_listfile`

was written by Michael K. Johnson <johnsonm@redhat.com> and Elliot Lee <sopwith@cuc.edu>.

#### 6.17. `pam_localuser` - require users to be listed in `/etc/passwd`

```
pam_localuser.so [ debug ] [ file=/path/passwd ]
```

##### 6.17.1. DESCRIPTION

`pam_localuser` is a PAM module to help implementing site-wide login policies, where they typically include a subset of the network's users and a few accounts that are local to a particular workstation. Using `pam_localuser` and `pam_wheel` or `pam_listfile` is an effective way to restrict access to either local users and/or a subset of the network's users.

This could also be implemented using `pam_listfile.so` and a very short awk script invoked by cron, but it's common enough to have been separated out.

##### 6.17.2. OPTIONS

`debug`

Print debug information.

`file=/path/passwd`

Use a file other than `/etc/passwd`.

##### 6.17.3. MODULE TYPES PROVIDED

All module types (account, auth, password and session) are provided.

##### 6.17.4. RETURN VALUES

`PAM_SUCCESS`

The

new localuser was set successfully.

#### PAM\_BUF\_ERR

Memory buffer error.

#### PAM\_CONV\_ERR

The conversation method supplied by the application failed to obtain the username.

#### PAM\_INCOMPLETE

The conversation method supplied by the application returned PAM\_CONV\_AGAIN.

#### PAM\_SERVICE\_ERR

The user name is not valid or the passwd file is unavailable.

#### PAM\_PERM\_DENIED

The user is not listed in the passwd file.

### 6.17.5. EXAMPLES

Add the following lines to /etc/pam.d/su to allow only local users or group wheel to use su.

```
account sufficient pam_localuser.so
account required pam_wheel.so
```

### 6.17.6. AUTHOR

pam\_localuser was written by Nalin Dahyabhai <nalin@redhat.com>.

### 6.18. pam\_loginuid - record user's login uid to the process attribute

```
pam_loginuid.so [ require_auditd ]
```

#### 6.18.1. DESCRIPTION

The pam\_loginuid module sets the loginuid process attribute for the process that was authenticated. This is necessary for applications to be correctly audited. This PAM module

should only be used for entry point applications like:

login, sshd, gdm, vsftpd, crond and atd. There are probably other entry point

applications besides these. You should not use it for applications like sudo or su as that defeats the purpose by changing the loginuid to the account they just switched to.

#### 6.18.2. OPTIONS

require\_auditd

This option, when given, will cause this module to query the audit daemon status and deny logins if it is not running.

#### 6.18.3. MODULE TYPES PROVIDED

Only the session module type is provided.

#### 6.18.4. RETURN VALUES

PAM\_SUCCESS

The loginuid value is set and auditd is running if check requested.

PAM\_IGNORE

The /proc/self/loginuid file is not present on the system or the login process runs inside uid namespace and kernel does not support overwriting loginuid.

PAM\_SESSION\_ERR

Any other error prevented setting loginuid or auditd is not running.

#### 6.18.5. EXAMPLES

```
##PAM-1.0
auth    required pam_unix.so
auth    required
        pam_nologin.so
account required pam_unix.so
password required pam_unix.so
session required pam_unix.so
session required pam_loginuid.so
```

#### 6.18.6. AUTHOR

pam\_loginuid was written by Steve Grubb <sgrubb@redhat.com>

6.19. pam\_mail - inform about available mail

pam\_mail.so [ close ] [ debug ] [ dir=maildir ] [ empty ] [ hash=count ] [ noenv ] [ nopen ] [ quiet ] [ standard ]

### 6.19.1. DESCRIPTION

The pam\_mail PAM module provides the "you have new mail" service to the user. It can be plugged into any application that has credential or session hooks. It gives a single message indicating the newness of any mail it finds in the user's mail folder. This module also sets the PAM environment variable, MAIL, to the user's mail directory.

If the mail pool file (be it /var/mail/\$USER or a pathname given with the dir= parameter) is a directory then pam\_mail assumes it is in the Maildir format.

### 6.19.2. OPTIONS

close

Indicate if the user has any mail also on logout.

debug

Print debug information.

dir=maildir

Look for the user's mail in an alternative location defined by maildir/<login>. The default location for mail is /var/mail/<login>. Note, if the supplied maildir is prefixed by a '~', the directory is interpreted as indicating a file in the user's home directory.

empty

Also print message if user has no mail.

hash=count

Mail directory hash depth. For example, a hashcount of 2 would make the mail file be /var/spool/mail/u/s/user.

noenv

Do not set the MAIL environment variable.

nopen

Don't print any mail information on login. This flag is useful to get the MAIL environment variable set, but to not display any information about it.

quiet

Only report when there is new mail.

standard

Old style "You have..." format which doesn't show the mail spool being used. This also implies "empty".

### 6.19.3. MODULE TYPES PROVIDED

The session and auth (on establishment and deletion of credentials) module types are provided.

### 6.19.4. RETURN VALUES

PAM\_BUF\_ERR

Memory buffer error.

PAM\_SERVICE\_ERR

Badly formed arguments.

PAM\_SUCCESS

Success.

PAM\_USER\_UNKNOWN

User not known.

### 6.19.5. EXAMPLES

Add the following line to /etc/pam.d/login to indicate that the user has new mail when they login to the system.

```
session optional pam_mail.so standard
```

### 6.19.6. AUTHOR

pam\_mail was written by Andrew G. Morgan <morgan@kernel.org>.

## 6.20. pam\_mkhome - create users home directory

pam\_mkhome.so [ silent ] [ debug ] [ umask=mode ] [ skel=skeldir ]

### 6.20.1. DESCRIPTION

The pam\_mkhome PAM module will create a users home directory if it does not exist when the session begins. This allows users to be present in central database (such as NIS, kerberos or LDAP) without using a distributed file system or pre-creating a large number of directories. The skeleton directory (usually /etc/skel/) is used to copy default files and also sets a umask for the creation.

The new users home directory will not be removed after logout of the user.

### 6.20.2. OPTIONS

silent

Don't print informative messages.

debug

Turns on debugging via syslog(3).

umask=mask

The file mode creation mask is set to mask. The default value of mask is 0022. If this option is not specified, then the permissions of created user home directory is set to the value of HOME\_MODE configuration item from /etc/login.defs. If there is no such configuration item then the value is computed from the value of UMASK in the same file. If there is no such configuration option either the default value of 0755 is used for the mode.

skel=/path/to/skel/directory

Indicate an alternative skel directory to override the default /etc/skel.

### 6.20.3. MODULE TYPES PROVIDED

Only the session module type is provided.

### 6.20.4. RETURN VALUES

PAM\_BUF\_ERR

Memory buffer error.

## PAM\_PERM\_DENIED

Not enough permissions to create the new directory  
or read the skel  
directory.

## PAM\_USER\_UNKNOWN

User not known to the underlying authentication module.

## PAM\_SUCCESS

Environment variables were set.

### 6.20.5. EXAMPLES

A sample `/etc/pam.d/login` file:

```
auth    requisite pam_securetty.so
auth    sufficient pam_ldap.so
auth    required pam_unix.so
auth    required pam_nologin.so
account sufficient pam_ldap.so
account required pam_unix.so
password required pam_unix.so
session required pam_mkhomedir.so skel=/etc/skel/ umask=0022
session required pam_unix.so
session optional pam_lastlog.so
session optional pam_mail.so standard
```

### 6.20.6. AUTHOR

`pam_mkhomedir` was written by Jason Gunthorpe <jgg@debian.org>.

### 6.21. pam\_motd - display the motd file

```
pam_motd.so [ motd=/path/filename ] [ motd_dir=/path/dirname.d ]
```

#### 6.21.1. DESCRIPTION

`pam_motd` is a PAM module that can be used to display arbitrary motd (message of the day) files after a successful login.

By default, `pam_motd` shows files in the following locations:

```
/etc/motd
```



/run/motd  
/usr/lib/motd  
/etc/motd.d/  
/run/motd.d/  
/usr/lib/motd.d/

Each message size is limited to 64KB.

If /etc/motd does not exist, then /run/motd is shown. If /run/motd does not exist, then /usr/lib/motd is shown.

Similar overriding behavior applies to the directories. Files in /etc/motd.d/ override files with the same name in /run/motd.d/ and /usr/lib/motd.d/. Files in /run/motd.d/ override files with the same name in /usr/lib/motd.d/.

Files in the directories listed above are displayed in lexicographic order by name. Moreover, the files are filtered by reading them with the credentials of the target user authenticating on the system.

To silence a message, a symbolic link with target /dev/null may be placed in /etc/motd.d with the same filename as the message to be silenced. Example: Creating a symbolic link as follows silences /usr/lib/motd.d/my\_motd.

```
ln -s /dev/null /etc/motd.d/my_motd
```

The MOTD\_SHOWN=pam environment variable is set after showing the motd files, even when all of them were silenced using symbolic links.

### 6.21.2. OPTIONS

motd=/path/filename

The /path/filename file is displayed as message of the day. Multiple paths to try can be specified as a colon-separated list. By default this option is set to /etc/motd:/run/motd:/usr/lib/motd.

motd\_dir=/path/dirname.d

The /path/dirname.d directory is scanned and each file contained inside of it is displayed. Multiple directories to scan can be specified as a colon-separated list. By default this option is set to /etc/motd.d:/run/motd.d:/usr/lib/motd.d.

When no options are given, the default behavior applies for both options. Specifying either option (or both) will disable the default behavior for both options.

### 6.21.3. MODULE TYPES PROVIDED

Only the session module type is provided.

### 6.21.4. RETURN VALUES

#### PAM\_ABORT

Not all relevant data or options could be obtained.

#### PAM\_BUF\_ERR

Memory  
buffer error.

#### PAM\_IGNORE

This is the default return value of this module.

### 6.21.5. EXAMPLES

The suggested usage for `/etc/pam.d/login` is:

```
session optional pam_motd.so
```

To use a motd file from a different location:

```
session optional pam_motd.so motd=/elsewhere/motd
```

To use a motd file from elsewhere, along with a corresponding `.d` directory:

```
session optional pam_motd.so motd=/elsewhere/motd motd_dir=/elsewhere/motd.d
```

### 6.21.6. AUTHOR

`pam_motd` was written by Ben Collins <bcollins@debian.org>.

The `motd_dir=` option was added by Allison Karlitskaya <allison.karlitskaya@redhat.com>.

### 6.22. pam\_namespace - setup a private namespace

```
pam_namespace.so [ debug ] [ unmnt_remnt ] [ unmnt_only ] [ require_selinux ] [ gen_hash ] [ ignore_config_error ] [ ignore_instance_parent_mode ] [ unmount_on_close ] [ use_current_context ] [ use_default_context ] [
```

mount\_private ]

### 6.22.1. DESCRIPTION

The pam\_namespace PAM module sets up a private namespace for a session with polyinstantiated

directories. A polyinstantiated directory provides a different instance of itself based on user name, or when using SELinux, user name, security context or both. If an executable script `/etc/security/namespace.init` exists, it is used to initialize the instance directory after it is set up and mounted on the polyinstantiated directory. The script receives the polyinstantiated directory path, the instance directory path, flag whether the instance directory was newly created (0 for no, 1 for yes), and the user name as its arguments.

If `/etc/security/namespace.init` does not exist, `%vendordir%/security/namespace.init` is the alternative to be used for it.

The pam\_namespace module disassociates the session namespace from the parent namespace. Any mounts/unmounts performed in the parent namespace, such as mounting of devices, are not reflected in the session namespace. To propagate selected mount/unmount events from the parent namespace into the disassociated session namespace, an administrator

may use the special shared-subtree feature.

For additional information on shared-subtree feature, please refer to the mount (8) man page and the shared-subtree description at <http://lwn.net/Articles/159077> and <http://lwn.net/Articles/159092>.

### 6.22.2. DESCRIPTION

The pam\_namespace.so module allows setup of private namespaces with polyinstantiated directories. Directories can be polyinstantiated based on user name or, in the case of SELinux, user name, sensitivity level or complete security context. If an executable script `/etc/security/namespace.init` exists, it is used to initialize the namespace every time an instance directory is set up and mounted. The script receives the polyinstantiated directory path and the instance directory path as its arguments.

The `/etc/security/namespace.conf` file specifies which directories are polyinstantiated, how they are polyinstantiated, how instance directories would be named, and any users for whom polyinstantiation would not be performed.

The

`/etc/security/namespace.conf` file ( or `%vendordir%/security/namespace.conf` if it does not exist) specifies which directories are polyinstantiated, how they are polyinstantiated, how instance directories would be named, and any users for whom polyinstantiation would not be performed. Then individual `*.conf` files from the `/etc/security/namespace.d/` and `%vendordir%/security/namespace.d`

directories are taken too. If /etc/security/namespace.d/@filename@.conf exists, then %vendordir%/security/namespace.d/@filename@.conf will not be used. All namespace.d/\*.conf files are sorted by their @filename@.conf in lexicographic order regardless of which of the directories they reside in.

When someone logs in, the file namespace.conf is scanned. Comments are marked by # characters. Each non comment line represents one polyinstantiated directory. The fields are separated by spaces but can be quoted by " characters also escape sequences \b, \n, and \t are recognized. The fields are as follows:

```
polydir
instance_prefix method list_of_uids
```

The first field, polydir, is the absolute pathname of the directory to polyinstantiate. The special string \$HOME is replaced with the user's home directory, and \$USER with the username. This field cannot be blank.

The second field, instance\_prefix is the string prefix used to build the pathname for the instantiation of <polydir>. Depending on the polyinstantiation method it is then appended with "instance differentiation string" to generate the final instance directory path. This directory is created if it did not exist already, and is then bind mounted on the <polydir> to provide an instance of <polydir> based on the <method> column. The special string \$HOME is replaced with the user's home directory, and \$USER with the username. This field cannot be blank.

The third field, method, is the method used for polyinstantiation. It can take these values; "user" for polyinstantiation based on user name, "level" for polyinstantiation based on process MLS level and user name, "context" for polyinstantiation based on process security context and user name, "tmpfs" for mounting tmpfs filesystem as an instance dir, and "tmpdir" for creating temporary directory as an instance dir which is removed when the user's session is closed. Methods "context" and "level" are only available with SELinux. This field cannot be blank.

The fourth field, list\_of\_uids, is a comma separated list of user names for whom the polyinstantiation is not performed. If left blank, polyinstantiation will be performed for all users. If the list is preceded with a single "~" character, polyinstantiation is performed only for users in the list.

The method field can contain also following optional flags separated by : characters.

create=mode,owner,group - create the polyinstantiated directory. The mode, owner and group parameters are optional. The default for mode is determined by umask, the default owner is the user whose session is opened, the default group is the

primary group of the user.

iscript=path - path to the instance directory init script. The base directory for relative paths is /etc/security/namespace.d.

noinit - instance directory init script will not be executed.

shared - the instance directories for "context" and "level" methods will not contain the user name and will be shared among all users.

mntopts=value - value of this flag is passed to the mount call when the tmpfs mount is done. It allows for example the specification of the maximum size of the tmpfs instance that is created by the mount call. In addition to options specified in the tmpfs(5) manual the nosuid, noexec, and nodev flags can be used to respectively disable setuid bit effect, disable running executables, and disable devices to be interpreted on the mounted tmpfs filesystem.

The directory where polyinstantiated instances are to be created, must exist and must have, by default, the mode of 0000. The requirement that the instance parent be of mode 0000 can be overridden with the command line option ignore\_instance\_parent\_mode

In case of context or level polyinstantiation the SELinux context which is used for polyinstantiation is the context used for executing a new process as obtained by getexeccon. This context must be set by the calling application or pam\_selinux.so module. If this context is not set the polyinstantiation will be based just on user name.

The "instance differentiation string" is <user name> for "user" method and <user name>\_<raw directory context> for "context" and "level" methods. If the whole string is too long the end of it is replaced with md5sum of itself. Also when command line option gen\_hash is used the whole string is replaced with md5sum of itself.

### 6.22.3. OPTIONS

debug

A lot of debug information is logged using syslog

unmnt\_remnt

For programs such as su and newrole, the login session has already setup a polyinstantiated namespace. For these programs, polyinstantiation is performed based on new user id or security context, however the command first needs to undo the polyinstantiation performed by login. This argument

instructs the command to first undo previous polyinstantiation before proceeding with new polyinstantiation based on new id/context

#### unmnt\_only

For trusted programs that want to undo any existing bind mounts and process instance directories on their own, this argument allows them to unmount currently mounted instance directories

#### require\_selinux

If selinux is not enabled, return failure

#### gen\_hash

Instead of using the security context string for the instance name, generate and use its md5 hash.

#### ignore\_config\_error

If a line in the configuration file corresponding to a polyinstantiated directory contains format error, skip that line process the next line. Without this option, pam will return an error to the calling program resulting in termination of the session.

#### ignore\_instance\_parent\_mode

Instance parent directories by default are expected to have the restrictive mode of 000. Using this option, an administrator can choose to ignore the mode of the instance parent. This option should be used with caution as it will reduce security and isolation goals of the polyinstantiation mechanism.

#### unmount\_on\_close

Explicitly unmount the polyinstantiated directories instead of relying on automatic namespace destruction after the last process in a namespace exits. This option should be used only in case it is ensured by other means that there cannot be any processes running in the private namespace left after the session close. It is also useful only in case there are multiple pam session calls in sequence from the same process.

#### use\_current\_context

Useful for services which do not change the SELinux context with setexeccon call. The module will use the current SELinux context of the calling process for the level and context polyinstantiation.

use\_default\_context

Useful for services which do not use pam\_selinux for changing the SELinux context with setexeccon call. The module will use the default SELinux context of the user for the level and context polyinstantiation.

mount\_private

This option can be used on systems where the / mount point or its submounts are made shared (for example with a mount --make-rshared / command). The module will mark the whole directory tree so any mount and unmount operations in the polyinstantiation namespace are private. Normally the pam\_namespace will try to detect the shared / mount point and make the polyinstantiated directories private automatically. This option has to be used just when only a subtree is shared and / is not.

Note that mounts and unmounts done in the private namespace will not affect the parent namespace if this option is used or when the shared / mount point is autodetected.

#### 6.22.4. MODULE TYPES PROVIDED

Only

the session module type is provided. The module must not be called from multithreaded processes.

#### 6.22.5. RETURN VALUES

PAM\_SUCCESS

Namespace setup was successful.

PAM\_SERVICE\_ERR

Unexpected system error occurred while setting up namespace.

PAM\_SESSION\_ERR

Unexpected namespace configuration error occurred.

#### 6.22.6. FILES

/etc/security/namespace.conf

Main configuration file

%vendordir%/security/namespace.conf

Default configuration file if /etc/security/namespace.conf does not exist.

/etc/security/namespace.d

Directory for additional configuration files

%vendordir%/security/namespace.d

Directory for additional vendor specific configuration files.

/etc/security/namespace.init

Init script for instance directories

%vendordir%/security/namespace.init

Vendor init script for instance directories if /etc/security/namespace.init does not exist.

#### 6.22.7. EXAMPLES

These are some example lines which might be specified in /etc/security/namespace.conf.

```
# The following three lines will polyinstantiate /tmp,  
# /var/tmp and user's home directories. /tmp and /var/tmp  
# will be polyinstantiated based on the security level  
# as well as user name, whereas home directory will be  
# polyinstantiated based on the full security context and user name.  
# Polyinstantiation will not be performed for user root  
# and adm for directories /tmp and /var/tmp, whereas home  
# directories will be polyinstantiated for all users.  
#  
# Note that instance directories do not have to reside inside  
# the polyinstantiated directory. In the examples below,  
# instances of /tmp will be created in /tmp-inst directory,  
# where as instances of /var/tmp and users home directories  
# will reside within the directories that are being  
# polyinstantiated.  
#  
/tmp /tmp-inst/          level root,adm  
/var/tmp /var/tmp/tmp-inst/ level root,adm  
$HOME $HOME/$USER.inst/inst- context
```

For the <service>s you need polyinstantiation (login for example) put the



following line in /etc/pam.d/<service> as the last line for session group:

```
session required pam_namespace.so [arguments]
```

This module also depends on pam\_selinux.so setting the context.

#### 6.22.8. AUTHORS

The namespace setup scheme was designed by Stephen Smalley, Janak Desai and Chad Sellers. The pam\_namespace PAM module was developed by Janak Desai <janak@us.ibm.com>, Chad Sellers <csellers@tresys.com> and Steve Grubb <sgrubb@redhat.com>. Additional improvements by Xavier Toth <txtoth@gmail.com> and Tomas Mraz <tmraz@redhat.com>.

#### 6.23. pam\_nologin - prevent non-root users from login

```
pam_nologin.so [ file=/path/nologin ] [ successok ]
```

##### 6.23.1. DESCRIPTION

pam\_nologin is a PAM module that prevents users from logging into the system when /var/run/nologin or /etc/nologin exists. The contents of the file are displayed to the user. The pam\_nologin module has no effect on the root user's ability to log in.

##### 6.23.2. OPTIONS

file=/path/nologin

Use this file instead the default /var/run/nologin or /etc/nologin.

successok

Return PAM\_SUCCESS if no file exists, the default is PAM\_IGNORE.

##### 6.23.3. MODULE TYPES PROVIDED

The auth and account module types are provided.

##### 6.23.4. RETURN VALUES

PAM\_AUTH\_ERR

The user is not root and /etc/nologin exists, so the user is not permitted to log in.

PAM\_BUF\_ERR

Memory buffer error.

## PAM\_IGNORE

This is the default return value.

## PAM\_SUCCESS

Success: either the user is root or the nologin file does not exist.

## PAM\_USER\_UNKNOWN

User not known to the underlying authentication module.

### 6.23.5. EXAMPLES

The suggested usage for `/etc/pam.d/login` is:

```
auth required pam_nologin.so
```

### 6.23.6. AUTHOR

`pam_nologin` was written by Michael K. Johnson <[johnsonm@redhat.com](mailto:johnsonm@redhat.com)>.

### 6.24. pam\_permit - the promiscuous module

```
pam_permit.so
```

#### 6.24.1. DESCRIPTION

`pam_permit` is a PAM module that always permit access. It does nothing else.

In the case of authentication, the user's name will be set to `nobody` if the application didn't set one. Many applications and PAM modules become confused if this name is unknown.

This module is very dangerous. It should be used with extreme caution.

#### 6.24.2. OPTIONS

This module does not recognise any options.

#### 6.24.3. MODULE TYPES PROVIDED

The `auth`, `account`, `password` and `session` module types are provided.

#### 6.24.4. RETURN VALUES

##### PAM\_SUCCESS

This module always returns this value.

#### 6.24.5. EXAMPLES

Add this line to your other login entries to disable account management, but continue to permit users to log in.

```
account required pam_permit.so
```

#### 6.24.6. AUTHOR

pam\_permit was written by Andrew G. Morgan, <morgan@kernel.org>.

#### 6.25. pam\_pwhistory - grant access using .pwhistory file

```
pam_pwhistory.so [ debug ] [ use_authtok ] [ enforce_for_root ] [ remember=N ]  
[ retry=N ] [ authtok_type=STRING ] [ file=/path/filename ] [ conf=/path/to/  
config-file  
]
```

##### 6.25.1. DESCRIPTION

This module saves the last passwords for each user in order to force password change history and keep the user from alternating between the same password too frequently.

This module does not work together with kerberos. In general, it does not make much sense to use this module in conjunction with NIS or LDAP, since the old passwords are stored on the local machine and are not available on another machine for password history checking.

##### 6.25.2. OPTIONS

debug

Turns on debugging via syslog(3).

use\_authtok

When password changing enforce the module to use the new password provided by a previously stacked password module (this is used in the example of the stacking of the pam\_passwdqc module documented below).

enforce\_for\_root

If this option is set, the check is enforced for root, too.

remember=N

The last N passwords for each user are saved. The default is 10. Value of 0 makes the module to keep the existing contents of the opasswd file unchanged.

retry=N

Prompt user at most N times before returning with error. The default is 1.

authtok\_type=STRING

See pam\_get\_authtok(3) for more details.

file=/path/filename

Store password history in file /path/filename rather than the default location. The default location is /etc/security/opasswd.

conf=/path/to/config-file

Use another configuration file instead of the default /etc/security/pwhistory.conf.

The options for configuring the module behavior are described in the pwhistory.conf(5) manual page. The options specified on the module command line override the values from the configuration file.

### 6.25.3. MODULE TYPES PROVIDED

Only the password module type is provided.

### 6.25.4. RETURN VALUES

PAM\_AUTHOK\_ERR

No new password was entered, the user aborted password change or new password couldn't be set.

PAM\_IGNORE

Password history was disabled.

## PAM\_MAXTRIES

Password was rejected too often.

## PAM\_USER\_UNKNOWN

User is not known to system.

## 6.25.5. FILES

/etc/security/opasswd

Default file with password history

/etc/security/pwhistory.conf

Config file for pam\_pwhistory options

%vendordir%/security/pwhistory.conf

Config file for pam\_pwhistory options. It will be used if /etc/security/pwhistory.conf does not exist.

## 6.25.6. EXAMPLES

An example password section would be:

```
##PAM-1.0
password required pam_pwhistory.so
password required pam_unix.so use_authok
```

In combination with pam\_passwdqc:

```
##PAM-1.0
password required pam_passwdqc.so config=/etc/passwdqc.conf
password required pam_pwhistory.so use_authok
password required pam_unix.so use_authok
```

## 6.25.7. AUTHOR

pam\_pwhistory was written by Thorsten Kukuk <kukuk@thkukuk.de>

## 6.26. pam\_rhosts - grant access using .rhosts file

pam\_rhosts.so

### 6.26.1. DESCRIPTION

This module performs the standard network authentication for services, as used by traditional implementations of rlogin and rsh etc.

The authentication mechanism of this module is based on the contents of two files; /etc/hosts.equiv (or and ~/.rhosts. Firstly, hosts listed in the former file are treated as equivalent to the localhost. Secondly, entries in the user's own copy of the latter file is used to map "remote-host remote-user" pairs to that user's account on the current host. Access is granted to the user if their host is present in /etc/hosts.equiv and their remote account is identical to their local one, or if their remote account has an entry in their personal configuration file.

The module authenticates a remote user (internally specified by the item PAM\_RUSER connecting from the remote host (internally specified by the item PAM\_RHOST). Accordingly, for applications to be compatible this authentication module they must set these items prior to calling pam\_authenticate(). The module is not capable of independently probing the network connection for such information.

### 6.26.2. OPTIONS

debug

Print debug information.

silent

Don't print informative messages.

superuser=account

Handle account as root.

### 6.26.3. MODULE TYPES PROVIDED

Only the auth module type is provided.

### 6.26.4. RETURN VALUES

PAM\_AUTH\_ERR

The remote host, remote user name or the local user name couldn't be determined or access was denied by .rhosts file.

## PAM\_USER\_UNKNOWN

User is not known to system.

### 6.26.5. EXAMPLES

To grant a remote user access by `/etc/hosts.equiv` or `.rhosts` for `rsh` add the following lines to `/etc/pam.d/rsh`:

```
##%PAM-1.0
#
auth    required    pam_rhosts.so
auth    required    pam_nologin.so
auth    required    pam_env.so
auth    required    pam_unix.so
```

### 6.26.6. AUTHOR

`pam_rhosts` was written by Thorsten Kukuk <kukuk@thkukuk.de>

### 6.27. pam\_rootok - gain only root access

`pam_rootok.so` [ debug ]

#### 6.27.1. DESCRIPTION

`pam_rootok` is a PAM module that authenticates the user if their UID is 0.

Applications

that are created `setuid-root` generally retain the UID of the user but run with the authority of an enhanced effective-UID. It is the real UID that is checked.

#### 6.27.2. OPTIONS

`debug`

Print debug information.

#### 6.27.3. MODULE TYPES PROVIDED

The `auth`, `account` and `password` module types are provided.

#### 6.27.4. RETURN VALUES

PAM\_SUCCESS

The UID is 0.

PAM\_AUTH\_ERR

The UID is not 0.

#### 6.27.5. EXAMPLES

In the case of the su(1) application the historical usage is to permit the superuser to adopt the identity of a lesser user without the use of a password. To obtain this behavior with PAM the following pair of lines are needed for the corresponding entry in the /etc/pam.d/su configuration file:

```
# su authentication. Root is granted access by default.  
auth sufficient pam_rootok.so  
auth required pam_unix.so
```

#### 6.27.6. AUTHOR

pam\_rootok was written by Andrew G. Morgan, <morgan@kernel.org>.

#### 6.28. pam\_securetty - limit root login to special devices

```
pam_securetty.so [ debug  
]
```

##### 6.28.1. DESCRIPTION

pam\_securetty is a PAM module that allows root logins only if the user is logging in on a "secure" tty, as defined by the listing in the securetty file. pam\_securetty checks at first, if /etc/securetty exists. If not and it was built with vendordir support, it will use %vendordir%/securetty. pam\_securetty also checks that the securetty files are plain files and not world writable. It will also allow root logins on the tty specified with console= switch on the kernel command line and on ttys from the /sys/class/tty/console/active.

This module has no effect on non-root users and requires that the application fills in the PAM\_TTY item correctly.

For canonical usage, should be listed as a required authentication method before any sufficient authentication methods.

##### 6.28.2. OPTIONS

debug

Print debug information.



noconsole

Do not automatically allow root logins on the kernel console device, as specified on the kernel command line or by the sys file, if it is not also specified in the securetty file.

### 6.28.3. MODULE TYPES PROVIDED

Only the auth module type is provided.

### 6.28.4. RETURN VALUES

#### PAM\_SUCCESS

The user is allowed to continue authentication. Either the user is not root, or the root user is trying to log in on an acceptable device.

#### PAM\_AUTH\_ERR

Authentication is rejected. Either root is attempting to log in via an unacceptable device, or the securetty file is world writable or not a normal file.

#### PAM\_BUF\_ERR

Memory buffer error.

#### PAM\_CONV\_ERR

The conversation method supplied by the application failed to obtain the username.

#### PAM\_INCOMPLETE

The conversation method supplied by the application returned PAM\_CONV\_AGAIN.

#### PAM\_SERVICE\_ERR

An error occurred while the module was determining the user's name or tty, or the module could not open the securetty file.

#### PAM\_USER\_UNKNOWN

The module could not find the user name in the /etc/passwd file to verify whether the

user had a UID of 0. Therefore, the results of running this module are ignored.

#### 6.28.5. EXAMPLES

```
auth required pam_securetty.so
auth required pam_unix.so
```

#### 6.28.6. AUTHOR

pam\_securetty was written by Elliot Lee <sopwith@cuc.edu>.

#### 6.29. pam\_selinux - set the default security context

```
pam_selinux.so [ open ] [ close ] [ restore ] [ nottys ] [ debug ] [ verbose ]
[ select_context ] [ env_params ] [ use_current_range ]
```

##### 6.29.1. DESCRIPTION

pam\_selinux is a PAM module that sets up the default SELinux security context for the next executed process.

When a new session is started, the `open_session` part of the module computes and sets up the execution security context used for the next `execve(2)` call, the file security context for the controlling terminal, and the security context used for creating a new kernel keyring.

When the session is ended, the `close_session` part of the module restores old security contexts that were in effect before the change made by the `open_session` part of the module.

Adding `pam_selinux` into the PAM stack might disrupt behavior of other PAM modules which execute applications. To avoid that, `pam_selinux.so open` should be placed after such modules in the PAM stack, and `pam_selinux.so close` should be placed before them. When such a placement is not feasible, `pam_selinux.so restore` could be used to temporarily restore original security contexts.

##### 6.29.2. OPTIONS

`open`

Only execute the `open_session` part of the module.

`close`

Only execute the `close_session` part of the module.

restore

In `open_session` part of the module, temporarily restore the security contexts as they were before the previous call of the module. Another call of this module without the `restore` option will set up the new security contexts again.

nottys

Do not setup security context of the controlling terminal.

debug

Turn on debug messages via `syslog(3)`.

verbose

Attempt to inform the user when security context is set.

select\_context

Attempt to ask the user for a custom security context role. If `MLS` is on, ask also for sensitivity level.

env\_params

Attempt to obtain a custom security context role from PAM environment. If `MLS` is on, obtain also sensitivity level. This option and the `select_context` option are mutually exclusive. The respective PAM environment variables are `SELINUX_ROLE_REQUESTED`, `SELINUX_LEVEL_REQUESTED`, and `SELINUX_USE_CURRENT_RANGE`. The first two variables are self describing and the last one if set to 1 makes the PAM module behave as if the `use_current_range` was specified on the command line of the module.

use\_current\_range

Use the sensitivity level of the current process for the user context instead of the default level. Also suppresses asking of the sensitivity level from the user or obtaining it from PAM environment.

### 6.29.3. MODULE TYPES PROVIDED

Only the session module type is provided.

### 6.29.4. RETURN VALUES

`PAM_SUCCESS`

The security context was set successfully.

#### PAM\_SESSION\_ERR

Unable to get or set a valid context.

#### PAM\_USER\_UNKNOWN

The user is not known to the system.

#### PAM\_BUF\_ERR

Memory allocation error.

### 6.29.5. EXAMPLES

```
auth    required pam_unix.so
session required pam_permit.so
session optional pam_selinux.so
```

### 6.29.6. AUTHOR

pam\_selinux was written by Dan Walsh <dwalsh@redhat.com>.

### 6.30. pam\_sepermit - allow/reject access based on SELinux mode

```
pam_sepermit.so [ debug ] [ conf=/path/to/config/file ]
```

#### 6.30.1. DESCRIPTION

The pam\_sepermit module allows or denies login depending on SELinux enforcement state.

When the user which is logging in matches an entry in the config file he is allowed access only when the SELinux is in enforcing mode. Otherwise he is denied access. For users not matching any entry in the config file the pam\_sepermit module returns PAM\_IGNORE return value.

The config file contains a list of user names one per line with optional arguments. If the name is prefixed with @ character it means that all users in the group name match. If it is prefixed with a % character the SELinux user is used to match against the name instead of the account name. Note that when SELinux is disabled the SELinux user assigned to the account cannot be determined. This means that such entries are never matched when SELinux is

disabled and pam\_sepermit will return PAM\_IGNORE.

See sepermit.conf(5) for details.

If there is no explicitly specified configuration file and /etc/security/sepermit.conf does not exist, %vendordir%/security/sepermit.conf is used.

### 6.30.2. OPTIONS

debug

Turns on debugging via syslog(3).

conf=/path/to/config/file

Path to alternative config file overriding the default.

### 6.30.3. MODULE TYPES PROVIDED

The auth and account module types are provided.

### 6.30.4. RETURN VALUES

PAM\_AUTH\_ERR

SELinux is disabled or in the permissive mode and the user matches.

PAM\_SUCCESS

SELinux is in the enforcing mode and the user matches.

PAM\_IGNORE

The user does not match any entry in the config file.

PAM\_USER\_UNKNOWN

The module was unable to determine the user's name.

PAM\_SERVICE\_ERR

Error during reading or parsing the config file.

### 6.30.5. FILES

/etc/security/sepermit.conf

Default configuration file

### 6.30.6. EXAMPLES

```
auth [success=done ignore=ignore default=bad] pam_sepermit.so
auth required pam_unix.so
account required pam_unix.so
session required pam_permit.so
```

### 6.30.7. AUTHOR

pam\_sepermit and this manual page were written by Tomas Mraz  
<tmraz@redhat.com>.

### 6.31. pam\_setquota - set or modify disk quotas on session start

```
pam_setquota.so [ fs=/home ] [ overwrite=0 ] [ debug=0 ] [ startuid=1000 ] [
enduid=0 ] [ bsoftlimit=19000 ] [ bhardlimit=20000 ] [ isoftlimit=3000 ] [
ihardlimit=4000 ]
```

#### 6.31.1. DESCRIPTION

pam\_setquota is a PAM module to set or modify a disk quota at session start

This makes quotas usable with central user databases, such as MySQL or LDAP.

#### 6.31.2. OPTIONS

fs=/home

The device file or mountpoint the policy applies to. Defaults to the filesystem containing the users home directory.

overwrite=0

Overwrite an existing quota. Note: Enabling this will remove the ability for the admin to manually configure different quotas for users for a filesystem with edquota(8). (Defaults to 0)

debug=0

Enable debugging. A value of 1 outputs the old and new quota on a device. A value of 2 also prints out the matched and found filesystems should fs be unset. (Defaults to 0)

startuid=1000

Describe the start of the UID range the policy is applied to. (Defaults to

UID\_MIN from login.defs or the uidmin value defined at compile-time if UID\_MIN is undefined.)

enduid=0

Describe the end of the UID range the policy is applied to. Setting enduid=0 results in an open-ended UID range (i.e. all uids greater than startuid are included). (Defaults to 0)

bsoftlimit=19000

Soft limit for disk quota blocks, as defined by quotactl(2). Note: bsoftlimit and bhardlimit must be set at the same time!

bhardlimit=20000

Hard limit for disk quota blocks, as defined by quotactl(2). Note: bsoftlimit and bhardlimit must be set at the same time!

isoftlimit=3000

Soft limit for inodes, as defined by quotactl(2). Note: isoftlimit and ihardlimit must be set at the same time!

ihardlimit=4000

Hard limit for inodes, as defined by quotactl(2). Note: isoftlimit and ihardlimit must be set at the same time!

### 6.31.3. MODULE TYPES PROVIDED

Only the session module type is provided.

### 6.31.4. RETURN VALUES

PAM\_SUCCESS

The quota was set successfully.

PAM\_IGNORE

No action was taken because either the UID of the user was outside of the specified range, a quota already existed and overwrite=1 was not configured or no limits were configured at all.

PAM\_USER\_UNKNOWN

The user was not found.

## PAM\_PERM\_DENIED

/proc/mounts could not be opened.

The filesystem  
or device specified was not found.

The limits for the user could not be retrieved. See syslog for more  
information.

The limits for the user could not be set. See syslog for more information.

Either isoftlimit/ihardlimit or bsoftlimit/bhardlimit were not set at the  
same time.

### 6.31.5. EXAMPLES

A single invocation of ``pam_setquota`` applies a specific policy to a UID range.  
Applying different policies to specific UID ranges is done by invoking  
`pam_setquota` more than once. The last matching entry defines the resulting  
quota.

```
session required pam_setquota.so bsoftlimit=1000 bhardlimit=2000 isoftlimit=1000 ihardlimit=2000  
startuid=1000 enduid=0 fs=/home
```

```
session required pam_setquota.so bsoftlimit=19000 bhardlimit=20000 isoftlimit=3000 ihardlimit=4000  
startuid=2001 enduid=3000 fs=/dev/sda1
```

```
session required pam_setquota.so bsoftlimit=19000 bhardlimit=20000 isoftlimit=3000 ihardlimit=4000  
startuid=3001 enduid=4000 fs=/dev/sda1 overwrite=1
```

### 6.31.6.

#### AUTHOR

`pam_setquota` was originally written by Ruslan Savchenko <savrus@mexmat.net>.

Further modifications were made by Shane Tzen <shane@ict.usc.edu>, Sven Hartge  
<sven@svenhartge.de> and Keller Fuchs <kellerfuchs@hashbang.sh>.

### 6.32. pam\_shells - check for valid login shell

`pam_shells.so`

#### 6.32.1. DESCRIPTION

`pam_shells` is a PAM module that only allows access to the system if the user's  
shell is listed in `/etc/shells`.



If this file does not exist, entries are taken from files %vendordir%/shells, %vendordir%/shells.d/\* and /etc/shells.d/\* in that order.

It also checks if needed files (e.g. /etc/shells) are plain files and not world writable.

#### 6.32.2. OPTIONS

This module does not recognise any options.

#### 6.32.3. MODULE TYPES PROVIDED

The auth and account module types are provided.

#### 6.32.4. RETURN VALUES

##### PAM\_AUTH\_ERR

Access to the system was denied.

##### PAM\_SUCCESS

The user's login shell was listed as valid shell in /etc/shells.

##### PAM\_SERVICE\_ERR

The module was not able to get the name of the user.

#### 6.32.5. EXAMPLES

```
auth required pam_shells.so
```

#### 6.32.6. AUTHOR

pam\_shells was written by Erik Troan <ewt@redhat.com>.

### 6.33. pam\_succeed\_if - test account characteristics

```
pam_succeed_if.so [flag...] [condition...]
```

#### 6.33.1. DESCRIPTION

pam\_succeed\_if.so is designed to succeed or fail authentication based on characteristics of the account belonging to the user being authenticated or values of other PAM items. One use is to select whether to load other modules

based on this test.

The module should be given one or more conditions as module arguments, and authentication will succeed only if all of the conditions are met.

### 6.33.2. OPTIONS

The following flags are supported:

`debug`

Turns on debugging messages sent to syslog.

`use_uid`

Evaluate conditions using the account of the user whose UID the application is running under instead of the user being authenticated.

`quiet`

Don't log failure or success to the system log.

`quiet_fail`

Don't log failure to the system log.

`quiet_success`

Don't log success to the system log.

`audit`

Log unknown users to the system log.

Conditions are three words: a field, a test, and a value to test for.

Available fields are user, uid, gid, shell, home, ruser, rhost, tty and service  
:

`field < number`

Field has a value numerically less than number.

`field <= number`

Field has a value numerically less than or equal to number.

`field eq number`

Field has a value numerically equal to number.

field >= number

Field has a value numerically greater than or equal to number.

field > number

Field has a value numerically greater than number.

field ne number

Field has a value numerically different from number.

field = string

Field exactly matches the given string.

field != string

Field does not match the given string.

field =~ glob

Field matches the given glob.

field !~ glob

Field does not match the given glob.

field in item:item:...

Field is contained in the list of items separated by colons.

field notin item:item:...

Field is not contained in the list of items separated by colons.

user ingroup group[:group:....]

User is in given group(s).

user notingroup group[:group:....]

User is not in given group(s).

user innetgr netgroup

(user,host) is in given netgroup.

user notinnetgr group

(user,host) is not in given netgroup.

### 6.33.3. MODULE TYPES PROVIDED

All module types (account, auth, password and session) are provided.

### 6.33.4. RETURN VALUES

#### PAM\_SUCCESS

The condition was true.

#### PAM\_AUTH\_ERR

The condition was false.

#### PAM\_SERVICE\_ERR

A service error occurred or the arguments can't be parsed correctly.

### 6.33.5. EXAMPLES

To emulate the behaviour of pam\_wheel, except there is no fallback to group 0 being only approximated by checking also the root group membership:

```
auth required pam_succeed_if.so quiet user ingroup wheel:root
```

Given that the type matches, only loads the othermodule rule if the UID is over 500. Adjust the number after default to skip several rules.

```
type [default=1 success=ignore] pam_succeed_if.so quiet uid > 500  
type required othermodule.so arguments...
```

### 6.33.6. AUTHOR

Nalin Dahyabhai <nalin@redhat.com>

### 6.34. pam\_time - time controlled access

```
pam_time.so [ conffile=conf-file ] [ debug ] [ noaudit ]
```

### 6.34.1. DESCRIPTION

The pam\_time PAM module does not authenticate the user, but instead it restricts access to a system and or specific applications at various times of the day and on specific days or over various terminal lines. This module can be configured to deny access to (individual) users based on their name, the time of day, the day of week, the service they are applying for and their terminal from which they are making their request.

By default rules for time/port access are taken from config file /etc/security/time.conf. An alternative file can be specified with the confdir option.

If there is no explicitly specified configuration file and /etc/security/time.conf does not exist, %vendordir%/security/time.conf is used.

If Linux PAM is compiled with audit support the module will report when it denies access.

### 6.34.2. DESCRIPTION

The pam\_time PAM module does not authenticate the user, but instead it restricts access to a system and or specific applications at various times of the day and on specific days or over various terminal lines. This module can be configured to deny access to (individual) users based on their name, the time of day, the day of week, the service they are applying for and their terminal from which they are making their request.

For this module to function correctly there must be a correctly formatted /etc/security/time.conf file present. White spaces are ignored and lines maybe extended with '\ ' (escaped newlines). Text following a '#' is ignored to the end of the line.

The syntax of the lines is as follows:

```
services;tty;users;times
```

In words, each rule occupies a line, terminated with a newline or the beginning of a comment; a '#'. It contains four fields separated with semicolons, ';':

The first field, the services field, is a logic list of PAM service names that the rule applies to.

The second field, the tty field, is a logic list of terminal names that this rule applies to.

The third field, the users field, is a logic list of users or a netgroup of users to whom this rule applies.

A logic list namely means individual tokens that are optionally prefixed with '!' (logical not) and separated with '&' (logical and) and '|' (logical or).

For these items the simple wildcard '\*' may be used only once. With netgroups no wildcards or logic operators are allowed.

The times field is used to indicate the times at which this rule applies. The format here is a logic list of day/time-range entries. The days are specified by a sequence of two character entries, MoTuSa for example is Monday Tuesday and Saturday. Note that repeated days are unset MoMo = no day, and MoWk = all weekdays bar Monday. The two character combinations accepted are Mo Tu We Th Fr Sa Su Wk Wd Al, the last two being week-end days and all 7 days of the week respectively. As a final example, AlFr means all days except Friday.

Each day/time-range can be prefixed with a '!' to indicate "anything but". The time-range part is two 24-hour times HHMM, separated by a hyphen, indicating the start and finish time (if the finish time is smaller than the start time it is deemed to apply on the following day).

For a rule to be active, ALL of service+ttys+users must be satisfied by the applying process.

Note, currently there is no daemon enforcing the end of a session. This needs to be remedied.

Poorly formatted rules are logged as errors using syslog(3).

### 6.34.3. OPTIONS

`conffile=/path/to/time.conf`

Indicate an alternative time.conf style configuration file to override the default.

`debug`

Some debug information is printed with syslog(3).

`noaudit`

Do not report logins at disallowed time to the audit subsystem.

### 6.34.4. MODULE TYPES PROVIDED

Only the account type is provided.

#### 6.34.5. RETURN VALUES

##### PAM\_SUCCESS

Access was granted.

##### PAM\_ABORT

Not all relevant data could be gotten.

##### PAM\_BUF\_ERR

Memory buffer error.

##### PAM\_PERM\_DENIED

Access was not granted.

##### PAM\_USER\_UNKNOWN

The user is not known to the system.

#### 6.34.6. FILES

`/etc/security/time.conf`

Default configuration file

#### 6.34.7. EXAMPLES

These are some example lines which might be specified in `/etc/security/time.conf`.

All users except for root are denied access to console-login at all times:

```
login ; tty* & !tty* ; !root ; !A10000-2400
```

Games (configured to use PAM) are only to be accessed out of working hours.

This rule does not apply to the user waster:

```
games ; * ; !waster ; Wd0000-2400 | Wk1800-0800
```

#### 6.34.8. AUTHOR

pam\_time was written by Andrew G. Morgan <morgan@kernel.org>.

6.35. pam\_timestamp - authenticate using cached successful authentication attempts

pam\_timestamp.so

[ timestampdir=directory ] [ timestamp\_timeout=number ] [ verbose ] [ debug ]

#### 6.35.1. DESCRIPTION

In a nutshell, pam\_timestamp caches successful authentication attempts, and allows you to use a recent successful attempt as the basis for authentication. This is similar mechanism which is used in sudo.

When an application opens a session using pam\_timestamp, a timestamp file is created in the timestampdir directory for the user. When an application attempts to authenticate the user, a pam\_timestamp will treat a sufficiently recent timestamp file as grounds for succeeding.

The default encryption hash is taken from the HMAC\_CRYPTO\_ALGO variable from /etc/login.defs.

#### 6.35.2. OPTIONS

timestampdir=directory

Specify an alternate directory where pam\_timestamp creates timestamp files.

timestamp\_timeout=number

How long should pam\_timestamp treat timestamp as valid after their last modification date (in seconds). Default is 300 seconds.

verbose

Attempt to inform the user when access is granted.

debug

Turns on debugging messages sent to syslog(3).

#### 6.35.3. MODULE TYPES PROVIDED

The auth and session module types are provided.

#### 6.35.4. RETURN VALUES



## PAM\_AUTH\_ERR

The module was not able to retrieve the user name or no valid timestamp file was found.

## PAM\_SUCCESS

Everything was successful.

## PAM\_SESSION\_ERR

Timestamp file could not be created or updated.

## 6.35.5. NOTES

Users can get confused when they are not always asked for passwords when running a given program. Some users reflexively begin typing information before noticing that it is not being asked for.

## 6.35.6. EXAMPLES

```
auth sufficient pam_timestamp.so verbose
auth required pam_unix.so
```

```
session required pam_unix.so
session optional pam_timestamp.so
```

## 6.35.7. FILES

/var/run/pam\_timestamp/...

timestamp files and directories

## 6.35.8. AUTHOR

pam\_timestamp was written by Nalin Dahyabhai.

## 6.36. pam\_tty\_audit - enable/disable tty auditing

```
pam_tty_audit.so [ disable=patterns ] [ enable=patterns ]
```

### 6.36.1. DESCRIPTION

The pam\_tty\_audit PAM module is used to enable or disable TTY auditing. By default, the kernel does not audit input on any TTY.

### 6.36.2. OPTIONS

#### disable=patterns

For each user matching patterns, disable TTY auditing. This overrides any previous enable option matching the same user name on the command line. See NOTES for further description of patterns.

#### enable=patterns

For each user matching patterns, enable TTY auditing. This overrides any previous disable option matching the same user name on the command line. See NOTES for further description of patterns.

#### open\_only

Set the TTY audit flag when opening the session, but do not restore it when closing the session. Using this option is necessary for some services that don't fork() to run the authenticated session, such as sudo.

#### log\_passwd

Log keystrokes when ECHO mode is off but ICANON mode is active. This is the mode in which the tty is placed during password entry. By default, passwords are not logged. This option may not be available on older kernels (3.9?).

### 6.36.3. MODULE TYPES PROVIDED

Only the session type is supported.

### 6.36.4. RETURN VALUES

#### PAM\_SESSION\_ERR

Error reading or modifying the TTY audit flag. See the system log for more details.

#### PAM\_SUCCESS

Success.

### 6.36.5. NOTES

When TTY auditing is enabled, it is inherited by all processes started by that user. In particular, daemons restarted by a user will still have TTY auditing

enabled, and audit TTY input even by other users unless auditing for these users is explicitly disabled. Therefore, it is recommended to use `disable=*` as the first option for most daemons using PAM.

To view the data that was logged by the kernel to audit use the command `aureport --tty`.

The patterns are comma separated lists of glob patterns or ranges of uids. A range is specified as `min_uid:max_uid` where one of these values can be empty.

If `min_uid` is empty only user with the uid `max_uid` will be matched. If `max_uid` is empty users with the uid greater than or equal to `min_uid` will be matched.

Please note that passwords in some circumstances may be logged by TTY auditing even if the `log_passwd` is not used. For example, all input to an ssh session will be logged - even if there is a password being typed into some software running at the remote host because only the local TTY state affects the local TTY auditing.

#### 6.36.6. EXAMPLES

Audit all administrative actions.

```
session required pam_tty_audit.so disable=* enable=root
```

#### 6.36.7. AUTHOR

`pam_tty_audit` was written by Miloslav Trma <mitr@redhat.com>. The `log_passwd` option was added by Richard Guy Briggs <rgb@redhat.com>.

#### 6.37. pam\_umask - set the file mode creation mask

```
pam_umask.so [ debug ] [ silent ] [ usergroups ] [ nousergroups ] [ umask=mask ]
```

##### 6.37.1. DESCRIPTION

`pam_umask` is a PAM module to set the file mode creation mask of the current environment.

The `umask` affects the default permissions assigned to newly created files.

The PAM module tries to get the `umask` value from the following places in the following order:

- `umask=` entry in the user's GECOS field

- umask= argument
- UMASK entry from /etc/login.defs
- UMASK= entry from /etc/default/login

The GECOS field is split on comma ',' characters. The module also in addition to the umask= entry recognizes pri= entry, which sets the nice priority value for the session, and ulimit= entry, which sets the maximum size of files the processes in the session can create.

### 6.37.2. OPTIONS

debug

Print debug information.

silent

Don't print informative messages.

usergroups

If the user is not root and the username is the same as primary group name, the umask group bits are set to be the same as owner bits (examples: 022 -> 002, 077 -> 007).

nousergroups

This is the direct opposite of the usergroups option described above, which can be useful in case pam\_umask has been compiled with usergroups enabled by default and you want to disable it at runtime.

umask=mask

Sets the calling process's file mode creation mask (umask) to mask & 0777. The value is interpreted as Octal.

### 6.37.3. MODULE TYPES PROVIDED

Only the session type is provided.

### 6.37.4. RETURN VALUES

PAM\_SUCCESS

The new umask was set successfully.

## PAM\_BUF\_ERR

Memory buffer error.

## PAM\_CONV\_ERR

The conversation method supplied by the application failed to obtain the username.

## PAM\_INCOMPLETE

The conversation method supplied by the application returned PAM\_CONV\_AGAIN.

## PAM\_SERVICE\_ERR

No username was given.

## PAM\_USER\_UNKNOWN

User not known.

### 6.37.5. EXAMPLES

Add the following line to `/etc/pam.d/login` to set the user specific umask at login:

```
session optional pam_umask.so umask=0022
```

### 6.37.6. AUTHOR

`pam_umask` was written by Thorsten Kukuk <kukuk@thkukuk.de>.

### 6.38. pam\_unix - traditional password authentication

`pam_unix.so`

[ ... ]

#### 6.38.1. DESCRIPTION

This is the standard Unix authentication module. It uses standard calls from the system's libraries to retrieve and set account information as well as authentication. Usually this is obtained from the `/etc/passwd` and the `/etc/shadow` file as well if shadow is enabled.

The account component performs the task of establishing the status of the

user's account and password based on the following shadow elements: `expire`, `last_change`, `max_change`, `min_change`, `warn_change`. In the case of the latter, it may offer advice to the user on changing their password or, through the `PAM_AUTHTOKEN_REQD` return, delay giving service to the user until they have established a new password. The entries listed above are documented in the `shadow(5)` manual page. Should the user's record not contain one or more of these entries, the corresponding shadow check is not performed.

The authentication component performs the task of checking the users credentials (password).

The default action of this module is to not permit the user access to a service if their official password is blank.

A helper binary, `unix_chkpwd(8)`, is provided to check the user's password when it is stored in a read protected database. This binary is very simple and will only check the password of the user invoking it. It is called transparently on behalf of the user by the authenticating component of this module. In this way it is possible for applications like `xlock(1)` to work without being `setuid-root`. The module, by default, will temporarily turn off `SIGCHLD` handling for the duration of execution of the helper binary. This is generally the right thing to do, as many applications are not prepared to handle this signal from a child they didn't know was `fork()`d. The `noreap` module argument can be used to suppress this temporary shielding and may be needed for use with certain applications.

The maximum length of a password supported by the `pam_unix` module via the helper binary is `PAM_MAX_RESP_SIZE` - currently 512 bytes. The rest of the password provided by the conversation function to the module will be ignored.

The password component of this module performs the task of updating the user's password. The default encryption hash is taken from the `ENCRYPT_METHOD` variable from `/etc/login.defs`

The session component of this module logs when a user logins or leave the system.

Remaining arguments, supported by others functions of this module, are silently ignored. Other arguments are logged as errors through `syslog(3)`.

### 6.38.2. OPTIONS

`debug`

Turns on debugging via `syslog(3)`.

`audit`

A little more extreme than debug.

quiet

Turns off informational messages namely messages about session open and close via syslog(3).

nullok

The default action of this module is to not permit the user access to a service if their official password is blank. The nullok argument overrides this default.

nullresetok

Allow users to authenticate with blank password if password reset is enforced even if nullok is not set. If password reset is not required and nullok is not set the authentication with blank password will be denied.

try\_first\_pass

Before prompting the user for their password, the module first tries the previous stacked module's password in case that satisfies this module as well.

use\_first\_pass

The argument use\_first\_pass forces the module to use a previous stacked modules password and will never prompt the user - if no password is available or the password is not appropriate, the user will be denied access.

nodelay

This argument can be used to discourage the authentication component from requesting a delay should the authentication as a whole fail. The default action is for the module to request a delay-on-failure of the order of two second.

use\_authtok

When password changing enforce the module to set the new password to the one provided by a previously stacked password module (this is used in the example of the stacking of the pam\_passwdqc module documented below).

authtok\_type=type

This argument can be used to modify the password prompt when changing passwords to include the type of the password. Empty by default.

nis

NIS RPC is used for setting new passwords.

remember=n

The last n passwords for each user are saved in /etc/security/opasswd in order to force password change history and keep the user from alternating between the same password too frequently. The MD5 password hash algorithm is used for storing the old passwords. Instead of this option the pam\_pwhistory module should be used.

shadow

Try to maintain a shadow based system.

md5

When a user changes their password next, encrypt it with the MD5 algorithm.

bigcrypt

When a user changes their password next, encrypt it with the DEC C2 algorithm.

sha256

When a user changes their password next, encrypt it with the SHA256 algorithm. The SHA256 algorithm must be supported by the crypt(3) function.

sha512

When a user changes their password next, encrypt it with the SHA512 algorithm. The SHA512 algorithm must be supported by the crypt(3) function.

blowfish

When a user changes their password next, encrypt it with the blowfish algorithm. The blowfish algorithm must be supported by the crypt(3) function.

gost\_ycrypt



When a user changes their password next, encrypt it with the gost-yescrypt algorithm. The gost-yescrypt algorithm must be supported by the crypt(3) function.

yescrypt

When a user changes their password next, encrypt it with the yescrypt algorithm. The yescrypt algorithm must be supported by the crypt(3) function.

rounds=n

Set the optional number of rounds of the SHA256, SHA512, blowfish, gost-yescrypt, and yescrypt password hashing algorithms to n.

broken\_shadow

Ignore errors reading shadow information for users in the account management module.

minlen=n

Set a minimum password length of n characters. The max. for DES crypt based passwords are 8 characters.

no\_pass\_expiry

When set ignore password expiration as defined by the shadow entry of the user. The option has an effect only in case pam\_unix was not used for the authentication or it returned authentication failure meaning that other authentication source or method succeeded. The example can be public key authentication in sshd. The module will return PAM\_SUCCESS instead of eventual PAM\_NEW\_AUTHTOK\_REQD or PAM\_AUTHTOK\_EXPIRED.

Invalid arguments are logged with syslog(3).

### 6.38.3. MODULE TYPES PROVIDED

All module types (account, auth, password and session) are provided.

### 6.38.4. RETURN VALUES

PAM\_IGNORE

Ignore this module.

### 6.38.5. EXAMPLES

An example usage for /etc/pam.d/login would be:

```
# Authenticate the user
auth    required pam_unix.so
# Ensure users account and password are still
active
account required pam_unix.so
# Change the user's password, but at first check the strength
# with pam_passwdqc(8)
password required pam_passwdqc.so config=/etc/passwdqc.conf
password required pam_unix.so use_authtok nullok yescrypt
session required pam_unix.so
```

#### 6.38.6. AUTHOR

pam\_unix was written by various people.

#### 6.39. pam\_userdb - authenticate against a db database

```
pam_userdb.so db=/path/database [ debug ] [ crypt=[crypt|none] ] [ icase ] [
dump ] [ try_first_pass ] [ use_first_pass ] [ unknown_ok ] [ key_only ]
```

##### 6.39.1. DESCRIPTION

The pam\_userdb module is used to verify a username/password pair against values stored in a Berkeley DB database. The database is indexed by the username, and the data fields corresponding to the username keys are the passwords.

##### 6.39.2. OPTIONS

crypt=[crypt|none]

Indicates whether encrypted or plaintext passwords are stored in the database. If it is crypt, passwords should be stored in the database in crypt(3)

form. If none is selected, passwords should be stored in the database as plaintext.

db=/path/database

Use the /path/database database for performing lookup. There is no default; the module will return PAM\_IGNORE if no database is provided. Note that the path to the database file should be specified without the .db suffix.

debug

Print debug information. Note that password hashes, both from db and computed, will be printed to syslog.

dump

Dump all the entries in the database to the log. Don't do this by default!

icase

Make the password verification to be case insensitive (ie when working with registration numbers and such). Only works with plaintext password storage.

try\_first\_pass

Use the authentication token previously obtained by another module that did the conversation with the application. If this token can not be obtained then the module will try to converse. This option can be used for stacking different modules that need to deal with the authentication tokens.

use\_first\_pass

Use the authentication token previously obtained by another module that did the conversation with the application. If this token can not be obtained then the module will fail. This option can be used for stacking different modules that need to deal with the authentication tokens.

unknown\_ok

Do not return error when checking for a user that is not in the database. This can be used to stack more than one pam\_userdb module that will check a username/password pair in more than a database.

key\_only

The username and password are concatenated together in the database hash as 'username-password' with a random value. if the concatenation of the username and password with a dash in the middle returns any result, the user is valid. this is useful in cases where the username may not be unique but the username and password pair are.

### 6.39.3. MODULE TYPES PROVIDED

The auth and account module types are provided.

### 6.39.4. RETURN VALUES

PAM\_AUTH\_ERR

Authentication failure.

PAM\_AUTHTOK\_RECOVERY\_ERR

Authentication information cannot be recovered.

PAM\_BUF\_ERR

Memory buffer error.

PAM\_CONV\_ERR

Conversation failure.

PAM\_SERVICE\_ERR

Error in service module.

PAM\_SUCCESS

Success.

PAM\_USER\_UNKNOWN

User not known to the underlying authentication module.

#### 6.39.5. EXAMPLES

```
auth sufficient pam_userdb.so icase db=/etc/dbtest
```

#### 6.39.6. AUTHOR

pam\_userdb was written by Cristian Gafton >gafton@redhat.com<.

#### 6.40. pam\_warn - logs all PAM items

pam\_warn.so

##### 6.40.1. DESCRIPTION

pam\_warn is a PAM module that logs the service, terminal, user, remote user and remote host to syslog(3). The items are not probed for, but instead obtained from the standard PAM items. The module always returns PAM\_IGNORE, indicating that it does not want to affect the authentication process.

## 6.40.2. OPTIONS

This module does not recognise any options.

## 6.40.3. MODULE

### TYPES PROVIDED

The auth, account, password and session module types are provided.

## 6.40.4. RETURN VALUES

### PAM\_IGNORE

This module always returns PAM\_IGNORE.

## 6.40.5. EXAMPLES

```
##%PAM-1.0
#
# If we don't have config entries for a service, the
# OTHER entries are used. To be secure, warn and deny
# access to everything.
other auth    required    pam_warn.so
other auth    required    pam_deny.so
other account required    pam_warn.so
other account required    pam_deny.so
other password required    pam_warn.so
other password required    pam_deny.so
other session required    pam_warn.so
other session required    pam_deny.so
```

## 6.40.6. AUTHOR

pam\_warn was written by Andrew G. Morgan <morgan@kernel.org>.

## 6.41. pam\_wheel - only permit root access to members of group wheel

```
pam_wheel.so [ debug ] [ deny ] [ group=name ] [ root_only ] [ trust ] [
use_uid ]
```

### 6.41.1. DESCRIPTION

The pam\_wheel PAM module is used to enforce the so-called wheel group. By default

it permits access to the target user if the applicant user is a member of the wheel group. If no group with this name exist, the module is using the group with the group-ID 0.

## 6.41.2. OPTIONS

### debug

Print debug information.

### deny

Reverse the sense of the auth operation: if the user is trying to get UID 0 access and is a member of the wheel group (or the group of the group option), deny access. Conversely, if the user is not in the group, return PAM\_IGNORE (unless trust was also specified, in which case we return PAM\_SUCCESS).

### group=name

Instead of checking the wheel or GID 0 groups, use the name group to perform the authentication.

### root\_only

The check for wheel membership is done only when the target user UID is 0.

### trust

The pam\_wheel module will return PAM\_SUCCESS instead of PAM\_IGNORE if the user is a member of the wheel group (thus with a little play stacking the modules the wheel members may be able to su to root without being prompted for a passwd).

### use\_uid

The check will be done against the real uid of the calling process, instead of trying to obtain the user from the login session associated with the terminal in use.

## 6.41.3. MODULE TYPES PROVIDED

The auth and account module types are provided.

## 6.41.4. RETURN VALUES

### PAM\_AUTH\_ERR

Authentication failure.

PAM\_BUF\_ERR

Memory buffer error.

PAM\_IGNORE

The return value should be ignored by PAM dispatch.

PAM\_PERM\_DENIED

Permission denied.

PAM\_SERVICE\_ERR

Cannot determine the user name.

PAM\_SUCCESS

Success.

PAM\_USER\_UNKNOWN

User not known.

#### 6.41.5. EXAMPLES

The root account gains access by default (rootok), only wheel members can become root (wheel) but Unix authenticate non-root applicants.

```
su  auth  sufficient  pam_rootok.so
su  auth  required   pam_wheel.so
su  auth  required   pam_unix.so
```

#### 6.41.6. AUTHOR

pam\_wheel was written by Cristian Gafton <gafton@redhat.com>.

#### 6.42.

pam\_xauth - forward xauth keys between users

```
pam_xauth.so [ debug ] [ xauthpath=/path/to/xauth ] [ systemuser=UID ] [
targetuser=UID ]
```

#### 6.42.1. DESCRIPTION

The pam\_xauth PAM module is designed to forward xauth keys (sometimes referred to as "cookies") between users.

Without `pam_xauth`, when `xauth` is enabled and a user uses the `su(1)` command to assume another user's privileges, that user is no longer able to access the original user's X display because the new user does not have the key needed to access the display. `pam_xauth` solves the problem by forwarding the key from the user running `su` (the source user) to the user whose identity the source user is assuming (the target user) when the session is created, and destroying the key when the session is torn down.

This means, for example, that when you run `su(1)` from an `xterm` session, you will be able to run X programs without explicitly dealing with the `xauth(1)` `xauth` command or `~/.Xauthority` files.

`pam_xauth` will only forward keys if `xauth` can list a key connected to the `$DISPLAY` environment variable.

Primitive access control is provided by `~/.xauth/export` in the invoking user's home directory and `~/.xauth/import` in the target user's home directory.

If a user has a `~/.xauth/import` file, the user will only receive cookies from users listed in the file. If there is no `~/.xauth/import` file, the user will accept cookies from any other user.

If a user has a `.xauth/export` file, the user will only forward cookies to users listed in the file. If there is no `~/.xauth/export` file, and the invoking user is not root, the user will forward cookies to any other user. If there is no `~/.xauth/export` file, and the invoking user is root, the user will not forward cookies to other users.

Both the import and export files support wildcards (such as `*`). Both the import and export files can be empty, signifying that no users are allowed.

#### 6.42.2. OPTIONS

`debug`

Print debug information.

`xauthpath=/path/to/xauth`

Specify the path the `xauth` program (it is expected in `/usr/X11R6/bin/xauth`, `/usr/bin/xauth`, or `/usr/bin/X11/xauth` by default).

`systemuser=UID`

Specify the highest UID which will be assumed to belong to a "system" user.



pam\_xauth will refuse to forward credentials to users with UID less than or equal to this number, except for root and the "targetuser", if specified.

targetuser=UID

Specify a single target UID which is exempt from the systemuser check.

### 6.42.3. MODULE TYPES PROVIDED

Only the session type is provided.

### 6.42.4. RETURN VALUES

PAM\_BUF\_ERR

Memory buffer error.

PAM\_PERM\_DENIED

Permission denied by import/export file.

PAM\_SESSION\_ERR

Cannot determine user name, UID or access users home directory.

PAM\_SUCCESS

Success.

PAM\_USER\_UNKNOWN

User not known.

### 6.42.5. EXAMPLES

Add the following line to /etc/pam.d/su to forward xauth keys between users when calling su:

```
session optional pam_xauth.so
```

### 6.42.6. AUTHOR

pam\_xauth was

written by Nalin Dahyabhai <nalin@redhat.com>, based on original version by Michael K. Johnson <johnsonm@redhat.com>.

Chapter 7. See also

- The Linux-PAM Application Writers' Guide.
- The Linux-PAM Module Writers' Guide.
- The V. Samar and R. Schemers (SunSoft), ``UNIFIED LOGIN WITH PLUGGABLE AUTHENTICATION MODULES'', Open Software Foundation Request For Comments 86.0, October 1995.

## Chapter 8. Author/acknowledgments

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## Chapter 9. Copyright information for this document

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Found in path(s):

\* /opt/cola/permits/1822720343\_1704297183.37862/0/linux-pam-1-5-3-docs-tar-xz/Linux-PAM-1.5.3/doc/sag/Linux-PAM\_SAG.txt

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The Linux-PAM Application Developers' Guide

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Abstract

This manual documents what an application developer needs to know about the Linux-PAM library. It describes how an application might use the Linux-PAM library to authenticate users. In addition it contains a description of the functions to be found in libpam\_misc library, that can be used in general applications. Finally, it contains some comments on PAM related security issues for the application developer.

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## Chapter 1. Introduction

### 1.1. Description

Linux-PAM (Pluggable Authentication Modules for Linux) is a library that enables the local system administrator to choose how individual applications authenticate users. For an overview of the Linux-PAM library see the Linux-PAM System Administrators' Guide.

It is the purpose of the Linux-PAM project to liberate the development of privilege granting software from the development of secure and appropriate authentication schemes. This is accomplished by providing a documented library of functions that an application may use for all forms of user authentication management. This library dynamically loads locally configured authentication modules that actually perform the authentication tasks.

From the perspective of an application developer the information contained in the local configuration of the PAM library should not be important. Indeed it is intended that an application treat the functions documented here as a 'black box' that will deal with all aspects of user authentication. 'All aspects' includes user verification, account management, session initialization/termination and also the resetting of passwords (authentication tokens).

### 1.2. Synopsis

For general applications that wish to use the services provided by Linux-PAM the following is a summary of the relevant linking information:

```
#include <security/pam_appl.h>
```

```
cc -o application .... -lpam
```

In addition to libpam, there is a library of miscellaneous functions that make the job of writing PAM-aware applications easier (this library is not covered

in the DCE-RFC for PAM and is specific to the Linux-PAM distribution):

```
#include
<security/pam_appl.h>
#include <security/pam_misc.h>

cc -o application .... -lpam -lpam_misc
```

## Chapter 2. Overview

Most service-giving applications are restricted. In other words, their service is not available to all and every prospective client. Instead, the applying client must jump through a number of hoops to convince the serving application that they are authorized to obtain service.

The process of authenticating a client is what PAM is designed to manage. In addition to authentication, PAM provides account management, credential management, session management and authentication-token (password changing) management services. It is important to realize when writing a PAM based application that these services are provided in a manner that is transparent to the application. That is to say, when the application is written, no assumptions can be made about how the client will be authenticated.

The process of authentication is performed by the PAM library via a call to `pam_authenticate()`.

The return value of this function will indicate whether a named client (the user) has been authenticated. If the PAM library needs to prompt the user for any information, such as their name or a password then it will do so. If the PAM library is configured to authenticate the user using some silent protocol, it will do this too. (This latter case might be via some hardware interface for example.)

It is important to note that the application must leave all decisions about when to prompt the user at the discretion of the PAM library.

The PAM library, however, must work equally well for different styles of application. Some applications, like the familiar `login` and `passwd` are terminal based applications, exchanges of information with the client in these cases is as plain text messages. Graphically based applications, however, have a more sophisticated interface. They generally interact with the user via specially constructed dialogue boxes. Additionally, network based services require that text messages exchanged with the client are specially formatted for automated processing: one such example is `ftpd` which prefixes each exchanged message with a numeric identifier.

The presentation of simple requests to a client is thus something very

dependent on the protocol that the serving application will use. In spite of the fact that PAM demands that it drives the whole authentication process, it is not possible to leave such protocol subtleties up to the PAM library. To overcome this potential problem, the application provides the PAM library with a conversation function. This function is called from within the PAM library and enables the PAM to directly interact with the client. The sorts of things that this conversation function must be able to do are prompt the user with text and/or obtain textual input from the user for processing by the PAM library. The details of this function are provided in a later section.

For example, the conversation function may be called by the PAM library with a request to prompt the user for a password. Its job is to reformat the prompt request into a form that the client will understand. In the case of `ftpd`, this might involve prefixing the string with the number 331 and sending the request over the network to a connected client. The conversation function will then obtain any reply and, after extracting the typed password, will return this string of text to the PAM library. Similar concerns need to be addressed in the case of an X-based graphical server.

There are a number of issues that need to be addressed when one is porting an existing application to become PAM compliant. A section below has been devoted to this: Porting legacy applications.

Besides authentication, PAM provides other forms of management. Session management is provided with calls to `pam_open_session()` and `pam_close_session()`. What these functions actually do is up to the local administrator. But typically, they could be used to log entry and exit from the system or for mounting and unmounting the user's home directory. If an application provides continuous service for a period of time, it should probably call these functions, first open after the user is authenticated and then close when the service is terminated.

Account management is another area that an application developer should include with a call to `pam_acct_mgmt()`. This call will perform checks on the good health of the user's account (has it expired etc.). One of the things this function may check is whether the user's authentication token has expired - in such a case the application may choose to attempt to update it with a call to `pam_chauthtok()`, although some applications are not suited to this task (`ftp` for example) and in this case the application should deny access to the user.

PAM is also capable of setting and deleting the user's credentials with the call `pam_setcred()`. This function should always be called after the user is authenticated and before service is offered to the user. By convention, this should be the last call to the PAM library before the PAM session is opened. What exactly a credential is, is not well defined. However, some examples are

given in the glossary below.

## Chapter 3. The public interface to Linux-PAM

Firstly, the relevant include file for the Linux-PAM library is `<security/pam_appl.h>`. It contains the definitions for a number of functions. After listing these functions, we collect some guiding remarks for programmers.

### 3.1. What can be expected by the application

#### 3.1.1. Initialization of PAM transaction

```
#include <security/pam_appl.h>
```

```
int pam_start( service_name,  
              user,  
              pam_conversation,  
              pamh);
```

```
const char *service_name;  
const char *user;  
const struct pam_conv *pam_conversation;  
pam_handle_t **pamh;
```

```
int pam_start_confdir( service_name,  
                      user,  
  
                      pam_conversation,  
                      confdir,  
                      pamh);
```

```
const char *service_name;  
const char *user;  
const struct pam_conv *pam_conversation;  
const char *confdir;  
pam_handle_t **pamh;
```

##### 3.1.1.1. DESCRIPTION

The `pam_start` function creates the PAM context and initiates the PAM transaction. It is the first of the PAM functions that needs to be called by an application. The transaction state is contained entirely within the structure identified by this handle, so it is possible to have multiple transactions in parallel. But it is not possible to use the same handle for different transactions, a new one is needed for every new context.



The `service_name` argument specifies the name of the service to apply and will be stored as `PAM_SERVICE` item in the new context. The policy for the service will be read from the file `/etc/pam.d/service_name` or, if that file does not exist, from `/etc/pam.conf`.

The `user` argument can specify the name of the target user and will be stored as `PAM_USER` item. If the argument is `NULL`, the module has to ask for this item if necessary.

The `pam_conversation` argument points to a struct `pam_conv` describing the conversation function to use. An application must provide this for direct communication between a loaded module and the application.

Following a successful return (`PAM_SUCCESS`) the contents of `pamh` is a handle that contains the PAM context for successive calls to the PAM functions. In an error case is the content of `pamh` undefined.

The `pam_handle_t` is a blind structure and the application should not attempt to probe it directly for information. Instead the PAM library provides the functions `pam_set_item(3)` and `pam_get_item(3)`. The PAM handle cannot be used for multiple authentications at the same time as long as `pam_end` was not called on it before.

The `pam_start_confdir` function behaves like the `pam_start` function but it also allows setting `confdir` argument with a path to a directory to override the default (`/etc/pam.d`) path for service policy files. If the `confdir` is `NULL`, the function works exactly the same as `pam_start`.

#### 3.1.1.2. RETURN VALUES

##### `PAM_ABORT`

General failure.

##### `PAM_BUF_ERR`

Memory buffer error.

##### `PAM_SUCCESS`

Transaction was successfully started.

##### `PAM_SYSTEM_ERR`

System error, for example a `NULL` pointer was submitted instead of a pointer to data.

### 3.1.2. Termination of PAM transaction

```
#include <security/pam_appl.h>
```

```
int pam_end( pamh,  
            pam_status);
```

```
pam_handle_t *pamh;  
int pam_status;
```

#### 3.1.2.1. DESCRIPTION

The `pam_end` function terminates the PAM transaction and is the last function an application should call in the PAM context. Upon return the handle `pamh` is no longer valid and all memory associated with it will be invalid.

The `pam_status` argument should be set to the value returned to the application by the last PAM library call.

The value taken by `pam_status` is used as an argument to the module specific callback function, `cleanup()` (See `pam_set_data(3)` and `pam_get_data(3)`). In this way the module can be given notification of the pass/fail nature of the tear-down process, and perform any last minute tasks that are appropriate to the module before it is unlinked. This argument can be logically OR'd with `PAM_DATA_SILENT` to indicate that the module should not treat the call too seriously. It is generally used to indicate that the current closing of the library is in a fork(2)ed process, and that the parent will take care of cleaning up things that exist outside of the current process space (files etc.).

This function free's all memory for items associated with the `pam_set_item(3)` and `pam_get_item(3)` functions. Pointers associated with such objects are not valid anymore after `pam_end` was called.

#### 3.1.2.2. RETURN VALUES

##### PAM\_SUCCESS

Transaction was successful terminated.

##### PAM\_SYSTEM\_ERR

System error, for example a NULL pointer was submitted as PAM handle or the function was called

by a module.

### 3.1.3. Setting PAM items

```
#include <security/pam_modules.h>
```

```
int pam_set_item( pamh,  
                 item_type,  
                 item);
```

```
pam_handle_t *pamh;  
int item_type;  
const void *item;
```

#### 3.1.3.1. DESCRIPTION

The `pam_set_item` function allows applications and PAM service modules to access and to update PAM information of `item_type`. For this a copy of the object pointed to by the `item` argument is created. The following `item_types` are supported:

##### PAM\_SERVICE

The service name (which identifies that PAM stack that the PAM functions will use to authenticate the program).

##### PAM\_USER

The username of the entity under whose identity service will be given. That is, following authentication, `PAM_USER` identifies the local entity that gets to use the service. Note, this value can be mapped from something (eg., "anonymous") to something else (eg. "guest119") by any module in the PAM stack. As such an application should consult the value of `PAM_USER` after each call to a PAM function.

##### PAM\_USER\_PROMPT

The string used when prompting for a user's name. The default value for this string is a localized version of "login: ".

##### PAM\_TTY

The terminal name prefixed by `/dev/` for device files. In the past, graphical X-based applications used to store the `$DISPLAY` variable here, but with the introduction of `PAM_XDISPLAY` this usage is deprecated.

## PAM\_RUSER

The requesting user name: local name for a locally requesting user or a remote user name for a remote requesting user.

Generally an application or module will attempt to supply the value that is most strongly authenticated (a local account before a remote one. The level of trust in this value is embodied in the actual authentication stack associated with the application, so it is ultimately at the discretion of the system administrator.

PAM\_RUSER@PAM\_RHOST should always identify the requesting user. In some cases, PAM\_RUSER may be NULL. In such situations, it is unclear who the requesting entity is.

## PAM\_RHOST

The requesting hostname (the hostname of the machine from which the PAM\_RUSER entity is requesting service). That is PAM\_RUSER@PAM\_RHOST does identify the requesting user. In some applications, PAM\_RHOST may be NULL. In such situations, it is unclear where the authentication request is originating from.

## PAM\_AUTHTOK

The authentication token (often a password). This token should be ignored by all module functions besides `pam_sm_authenticate(3)` and `pam_sm_chauthtok(3)`. In the former function it is used to pass the most recent authentication token from one stacked module to another. In the latter function the token is used for another purpose. It contains the currently active authentication token.

## PAM\_OLDAUTHTOK

The old authentication token. This token should be ignored by all module functions except `pam_sm_chauthtok(3)`.

## PAM\_CONV

The `pam_conv` structure. See `pam_conv(3)`.

The following additional items are specific to Linux-PAM and should not be used in portable applications:

## PAM\_FAIL\_DELAY

A function pointer to redirect centrally managed failure delays. See

pam\_fail\_delay(3).

## PAM\_XDISPLAY

The name of the X display. For graphical, X-based applications the value for this item should be the \$DISPLAY variable. This value may be used independently of PAM\_TTY for passing the name of the display.

## PAM\_XAUTHDATA

A pointer to a structure containing the X authentication data required to make a connection to the display specified by PAM\_XDISPLAY, if such information is necessary. See pam\_xauth\_data(3).

## PAM\_AUTHTOK\_TYPE

The default action is for the module to use the following prompts when requesting passwords: "New UNIX password: " and "Retype UNIX password: ". The example word UNIX can be replaced with this item, by default it is empty. This item is used by pam\_get\_authtok(3).

For all item\_types, other than PAM\_CONV and PAM\_FAIL\_DELAY, item is a pointer to a <NUL> terminated character string. In the case of PAM\_CONV, item points to an initialized pam\_conv structure. In the case of PAM\_FAIL\_DELAY, item is a function pointer: void (\*delay\_fn)(int retval, unsigned usec\_delay, void \*appdata\_ptr)

Both, PAM\_AUTHTOK and PAM\_OLDAUTHTOK, will be reset before returning to the application. Which means an application is not able to access the authentication tokens.

### 3.1.3.2. RETURN VALUES

#### PAM\_BAD\_ITEM

The application attempted to set an undefined or inaccessible item.

#### PAM\_BUF\_ERR

Memory buffer error.

#### PAM\_SUCCESS

Data was successful updated.

#### PAM\_SYSTEM\_ERR

The pam\_handle\_t passed as first argument was invalid.

#### 3.1.4. Getting PAM items

```
#include <security/pam_modules.h>
```

```
int pam_get_item( pamh,  
                 item_type,  
                 item);
```

```
const pam_handle_t *pamh;  
int item_type;  
const void **item;
```

##### 3.1.4.1. DESCRIPTION

The pam\_get\_item function allows applications and PAM service modules to access and retrieve PAM information of item\_type. Upon successful return, item contains a pointer to the value of the corresponding item. Note, this is a pointer to the actual data and should not be free()'ed or over-written! The following values are supported for item\_type:

##### PAM\_SERVICE

The service name (which identifies that PAM stack that the PAM functions will use to authenticate the program).

##### PAM\_USER

The username of the entity under whose identity service will be given. That is, following authentication, PAM\_USER identifies the local entity that gets to use the service. Note, this value can be mapped from something (eg., "anonymous") to something else (eg. "guest119") by any module in the PAM stack. As such an application should consult the value of PAM\_USER after each call to a PAM function.

##### PAM\_USER\_PROMPT

The string used when prompting for a user's name. The default value for this string is a localized version of "login: ".

##### PAM\_TTY

The terminal name prefixed by /dev/ for device files. In the past, graphical X-based applications used to store the \$DISPLAY variable here, but with the introduction of PAM\_XDISPLAY this usage is deprecated.

## PAM\_RUSER

The requesting user name: local name for a locally requesting user or a remote user name for a remote requesting user.

Generally an application or module will attempt to supply the value that is most strongly authenticated (a local account before a remote one. The level of trust in this value is embodied in the actual authentication stack associated with the application, so it is ultimately at the discretion of the system administrator.

PAM\_RUSER@PAM\_RHOST should always identify the requesting user. In some cases, PAM\_RUSER may be NULL. In such situations, it is unclear who the requesting entity is.

## PAM\_RHOST

The requesting hostname (the hostname of the machine from which the PAM\_RUSER entity is requesting service). That is PAM\_RUSER@PAM\_RHOST does identify the requesting user. In some applications, PAM\_RHOST may be NULL. In such situations, it is unclear where the authentication request is originating from.

## PAM\_AUTHTOK

The authentication token (often a password). This token should be ignored by all module functions besides pam\_sm\_authenticate(3) and pam\_sm\_chauthtok(3). In the former function it is used to pass the most recent authentication token from one stacked module to another. In the latter function the token is used for another purpose. It contains the currently active authentication token.

## PAM\_OLDAUTHTOK

The old authentication token. This token should be ignored by all module functions except pam\_sm\_chauthtok(3).

## PAM\_CONV

The pam\_conv structure. See pam\_conv(3).

The following additional items are specific to Linux-PAM and should not be used in portable applications:

## PAM\_FAIL\_DELAY

A function pointer to redirect centrally managed failure delays. See `pam_fail_delay(3)`.

#### PAM\_XDISPLAY

The name of the X display. For graphical, X-based applications the value for this item should be the `$DISPLAY` variable. This value may be used independently of `PAM_TTY` for passing the name of the display.

#### PAM\_XAUTHDATA

A pointer to a structure containing the X authentication data required to make a connection to the display specified by `PAM_XDISPLAY`, if such information is necessary. See `pam_xauth_data(3)`.

#### PAM\_AUTHTOK\_TYPE

The default action is for the module to use the following prompts when requesting passwords: "New UNIX password: " and "Retype UNIX password: ". The example word UNIX can be replaced with this item, by default it is empty. This item is used by `pam_get_authtok(3)`.

If a service module wishes to obtain the name of the user, it should not use this function,  
but instead perform a call to `pam_get_user(3)`.

Only a service module is privileged to read the authentication tokens, `PAM_AUTHTOK` and `PAM_OLDAUTHTOK`.

#### 3.1.4.2. RETURN VALUES

##### PAM\_BAD\_ITEM

The application attempted to set an undefined or inaccessible item.

##### PAM\_BUF\_ERR

Memory buffer error.

##### PAM\_PERM\_DENIED

The value of item was NULL.

##### PAM\_SUCCESS

Data was successful updated.



## PAM\_SYSTEM\_ERR

The pam\_handle\_t passed as first argument was invalid.

### 3.1.5. Strings describing PAM error codes

```
#include <security/pam_appl.h>
```

```
const char *pam_strerror( pamh,  
                          errnum);
```

```
pam_handle_t *pamh;  
int errnum;
```

#### 3.1.5.1. DESCRIPTION

The pam\_strerror function returns a pointer to a string describing the error code passed in the argument errnum, possibly using the LC\_MESSAGES part of the current locale to select the appropriate language. This string must not be modified by the application. No library function will modify this string.

#### 3.1.5.2.

##### RETURN VALUES

This function returns always a pointer to a string.

### 3.1.6. Request a delay on failure

```
#include <security/pam_appl.h>
```

```
int pam_fail_delay( pamh,  
                   usec);
```

```
pam_handle_t *pamh;  
unsigned int usec;
```

#### 3.1.6.1. DESCRIPTION

The pam\_fail\_delay function provides a mechanism by which an application or module can suggest a minimum delay of usec micro-seconds. The function keeps a record of the longest time requested with this function. Should pam\_authenticate(3) fail, the failing return to the application is delayed by an amount of time randomly distributed (by up to 50%) about this longest value.

Independent of success, the delay time is reset to its zero default value when the PAM service module returns control to the application. The delay occurs

after all authentication modules have been called, but before control is returned to the service application.

When using this function the programmer should check if it is available with:

```
#ifdef HAVE_PAM_FAIL_DELAY
....
#endif /* HAVE_PAM_FAIL_DELAY */
```

For applications written with a single thread that are event driven in nature, generating this delay may be undesirable. Instead, the application may want to register the delay in some other way. For example, in a single threaded server that serves multiple authentication requests from a single event loop, the application might want to simply mark a given connection as blocked until an application timer expires. For this reason the delay function can be changed with the PAM\_FAIL\_DELAY item. It can be queried and set with pam\_get\_item(3) and pam\_set\_item(3) respectively. The value used to set it should be a function pointer of the following prototype:

```
void (*delay_fn)(int retval, unsigned usec_delay, void *appdata_ptr);
```

The arguments being the retval return code of the module stack, the usec\_delay micro-second delay that libpam is requesting and the appdata\_ptr that the application has associated with the current pamh. This last value was set by the application when it called pam\_start(3) or explicitly with pam\_set\_item(3).

Note that the PAM\_FAIL\_DELAY item is set to NULL by default. This indicates that PAM should perform a random delay as described above when authentication fails and a delay has been suggested. If an application does not want the PAM library to perform any delay on authentication failure, then the application must define a custom delay function that executes no statements and set the PAM\_FAIL\_DELAY item to point to this function.

### 3.1.6.2. RETURN VALUES

#### PAM\_SUCCESS

Delay was successful adjusted.

#### PAM\_SYSTEM\_ERR

A NULL pointer was submitted as PAM handle.

### 3.1.7. Authenticating the user

```
#include <security/pam_appl.h>
```

```
int pam_authenticate( pamh,  
                    flags);
```

```
pam_handle_t *pamh;  
int flags;
```

### 3.1.7.1. DESCRIPTION

The `pam_authenticate` function is used to authenticate the user. The user is required to provide an authentication token depending upon the authentication service, usually this is a password, but could also be a finger print.

The PAM service module may request that the user enter their username via the conversation mechanism (see `pam_start(3)` and `pam_conv(3)`). The name of the authenticated user will be present in the PAM item `PAM_USER`. This item may be recovered with a call to `pam_get_item(3)`.

The `pamh` argument is an authentication handle obtained by a prior call to `pam_start()`. The `flags` argument is the binary or of zero or more of the following values:

#### PAM\_SILENT

Do not emit any messages.

#### PAM\_DISALLOW\_NULL\_AUTH Tok

The PAM module service should return `PAM_AUTH_ERR` if the user does not have a registered authentication token.

### 3.1.7.2. RETURN VALUES

#### PAM\_ABORT

The application should exit immediately after calling `pam_end(3)` first.

#### PAM\_AUTH\_ERR

The user was not authenticated.

#### PAM\_CRED\_INSUFFICIENT

For some reason the application does not have sufficient credentials to authenticate the user.

## PAM\_AUTHINFO\_UNAVAIL

The modules were not able to access the authentication information. This might be due to a network or hardware failure etc.

## PAM\_MAXTRIES

One or more of the authentication modules has reached its limit of tries authenticating the user. Do not try again.

## PAM\_SUCCESS

The user was successfully authenticated.

## PAM\_USER\_UNKNOWN

User unknown to authentication service.

### 3.1.8. Setting user credentials

```
#include <security/pam_appl.h>
```

```
int pam_setcred( pamh,  
                flags);
```

```
pam_handle_t *pamh;  
int flags;
```

#### 3.1.8.1. DESCRIPTION

The `pam_setcred` function is used to establish, maintain and delete the credentials of a user. It should be called to set the credentials after a user has been authenticated and before a session is opened for the user (with `pam_open_session(3)`). The credentials should be deleted after the session has been closed (with `pam_close_session(3)`).

A credential is something that the user possesses. It is some property, such as a Kerberos ticket, or a supplementary group membership that make up the uniqueness of a given user. On a Linux system the user's UID and GID's are credentials too. However, it has been decided that these properties (along with the default supplementary groups of which the user is a member) are credentials that should be set directly by the application and not by PAM. Such credentials should be established, by the application, prior to a call to this function. For example, `initgroups(2)` (or equivalent) should have been performed.

Valid flags, any one of which, may be logically OR'd with PAM\_SILENT, are:

PAM\_ESTABLISH\_CRED

Initialize the credentials for the user.

PAM\_DELETE\_CRED

Delete the user's credentials.

PAM\_REINITIALIZE\_CRED

Fully reinitialize the user's credentials.

PAM\_REFRESH\_CRED

Extend the lifetime of the existing credentials.

### 3.1.8.2. RETURN VALUES

PAM\_BUF\_ERR

Memory buffer error.

PAM\_CRED\_ERR

Failed to set user credentials.

PAM\_CRED\_EXPIRED

User credentials are expired.

PAM\_CRED\_UNAVAIL

Failed to retrieve user credentials.

PAM\_SUCCESS

Data was successful stored.

PAM\_SYSTEM\_ERR

A NULL pointer was submitted as PAM handle, the function was called by a module or another system error occurred.

PAM\_USER\_UNKNOWN

User is not known to an authentication module.

### 3.1.9. Account validation management

```
#include <security/pam_appl.h>
```

```
int pam_acct_mgmt( pamh,  
                  flags);
```

```
pam_handle_t *pamh;  
int flags;
```

#### 3.1.9.1. DESCRIPTION

The `pam_acct_mgmt` function is used to determine if the user's account is valid. It checks for authentication token and account expiration and verifies access restrictions. It is typically called after the user has been authenticated.

The `pamh` argument is an authentication handle obtained by a prior call to `pam_start()`. The `flags` argument is the binary or of zero or more of the following values:

##### PAM\_SILENT

Do not emit any messages.

##### PAM\_DISALLOW\_NULL\_AUTHCHK

The PAM module service should return `PAM_NEW_AUTHCHK_REQD` if the user has a null authentication token.

#### 3.1.9.2. RETURN VALUES

##### PAM\_ACCT\_EXPIRED

User account has expired.

##### PAM\_AUTH\_ERR

Authentication failure.

##### PAM\_NEW\_AUTHCHK\_REQD

The user account is valid but their authentication token is expired. The correct response to this return-value is to require that the user satisfies the `pam_chauthtok()` function before obtaining service. It may not be possible for some applications to do this. In such cases, the user should be denied access until such time as they can update their password.

## PAM\_PERM\_DENIED

Permission denied.

## PAM\_SUCCESS

The authentication token was successfully updated.

## PAM\_USER\_UNKNOWN

User unknown to password service.

### 3.1.10. Updating authentication tokens

```
#include <security/pam_appl.h>
```

```
int pam_chauthtok( pamh,  
                  flags);
```

```
pam_handle_t *pamh;  
int flags;
```

#### 3.1.10.1.

##### DESCRIPTION

The `pam_chauthtok` function is used to change the authentication token for a given user (as indicated by the state associated with the handle `pamh`).

The `pamh` argument is an authentication handle obtained by a prior call to `pam_start()`. The `flags` argument is the binary or of zero or more of the following values:

##### PAM\_SILENT

Do not emit any messages.

##### PAM\_CHANGE\_EXPIRED\_AUTH Tok

This argument indicates to the modules that the user's authentication token (password) should only be changed if it has expired. If this argument is not passed, the application requires that all authentication tokens are to be changed.

#### 3.1.10.2. RETURN VALUES

##### PAM\_AUTH Tok\_ERR

A module was unable to obtain the new authentication token.

#### PAM\_AUTHTOK\_RECOVERY\_ERR

A module was unable to obtain the old authentication token.

#### PAM\_AUTHTOK\_LOCK\_BUSY

One or more of the modules was unable to change the authentication token since it is currently locked.

#### PAM\_AUTHTOK\_DISABLE\_AGING

Authentication token aging has been disabled for at least one of the modules.

#### PAM\_PERM\_DENIED

Permission denied.

#### PAM\_SUCCESS

The authentication token was successfully updated.

#### PAM\_TRY\_AGAIN

Not all of the modules were in a position to update the authentication token(s). In such a case none of the user's authentication tokens are updated.

#### PAM\_USER\_UNKNOWN

User unknown to password service.

#### 3.1.11. Start PAM session management

```
#include <security/pam_appl.h>
```

```
int pam_open_session( pamh,  
                    flags);
```

```
pam_handle_t *pamh;
```

```
int flags;
```

#### 3.1.11.1. DESCRIPTION



The `pam_open_session` function sets up a user session for a previously successful authenticated user. The session should later be terminated with a call to `pam_close_session(3)`.

It should be noted that the effective uid, `geteuid(2)`, of the application should be of sufficient privilege to perform such tasks as creating or mounting the user's home directory for example.

The flags argument is the binary or of zero or more of the following values:

#### PAM\_SILENT

Do not emit any messages.

#### 3.1.11.2. RETURN VALUES

#### PAM\_ABORT

General failure.

#### PAM\_BUF\_ERR

Memory buffer error.

#### PAM\_SESSION\_ERR

Session failure.

#### PAM\_SUCCESS

Session was successful created.

#### 3.1.12. terminating PAM session management

```
#include <security/pam_appl.h>
```

```
int pam_close_session( pamh,  
                      flags);
```

```
pam_handle_t *pamh;  
int flags;
```

#### 3.1.12.1. DESCRIPTION

The `pam_close_session` function is used to indicate that an authenticated session has ended. The session should have been created with a call to

pam\_open\_session(3).

It should be noted that the effective uid, `geteuid(2)`, of the application should be of sufficient privilege to perform such tasks as unmounting the user's home directory for example.

The flags argument is the binary or of zero or more of the following values:

PAM\_SILENT

Do not emit any messages.

3.1.12.2.

RETURN VALUES

PAM\_ABORT

General failure.

PAM\_BUF\_ERR

Memory buffer error.

PAM\_SESSION\_ERR

Session failure.

PAM\_SUCCESS

Session was successful terminated.

3.1.13. Set or change PAM environment variable

```
#include <security/pam_appl.h>
```

```
int pam_putenv( pamh,  
               name_value);
```

```
pam_handle_t *pamh;  
const char *name_value;
```

3.1.13.1. DESCRIPTION

The `pam_putenv` function is used to add or change the value of PAM environment variables as associated with the `pamh` handle.

The `pamh` argument is an authentication handle obtained by a prior call to

pam\_start(). The name\_value argument is a single NUL terminated string of one of the following forms:

NAME=value of variable

In this case the environment variable of the given NAME is set to the indicated value: value of variable. If this variable is already known, it is overwritten. Otherwise it is added to the PAM environment.

NAME=

This function sets the variable to an empty value. It is listed separately to indicate that this is the correct way to achieve such a setting.

NAME

Without an '=' the pam\_putenv() function will delete the corresponding variable from the PAM environment.

pam\_putenv() operates on a copy of name\_value, which means in contrast to putenv(3), the application is responsible for freeing the data.

### 3.1.13.2. RETURN VALUES

PAM\_PERM\_DENIED

Argument name\_value given is a NULL pointer.

PAM\_BAD\_ITEM

Variable requested (for deletion) is not currently set.

PAM\_ABORT

The pamh handle is corrupt.

PAM\_BUF\_ERR

Memory buffer error.

PAM\_SUCCESS

The environment variable was successfully updated.

### 3.1.14. Get a PAM environment variable

```
#include <security/pam_appl.h>
```

```
const char *pam_getenv( pamh,  
                        name);  
  
pam_handle_t *pamh;  
const char *name;
```

#### 3.1.14.1. DESCRIPTION

The `pam_getenv` function searches the PAM environment list as associated with the handle `pamh` for an item that matches the string pointed to by `name` and returns a pointer to the value of the environment variable. The application is not allowed to free the data.

#### 3.1.14.2. RETURN VALUES

The `pam_getenv` function returns `NULL` on failure.

#### 3.1.15. Getting the PAM environment

```
#include <security/pam_appl.h>  
  
char **pam_getenvlist( pamh);  
  
pam_handle_t *pamh;
```

#### 3.1.15.1. DESCRIPTION

The `pam_getenvlist` function returns a complete copy of the PAM environment as associated with the handle `pamh`. The PAM environment variables represent the contents of the regular environment variables of the authenticated user when service is granted.

The format of the memory is a `malloc()`'d array of char pointers, the last element of which is set to `NULL`. Each of the non-`NULL` entries in this array point to a NUL terminated and `malloc()`'d char string of the form: "name=value".

It should be noted that this memory will never be `free()`'d by `libpam`. Once obtained by a call to `pam_getenvlist`, it is the responsibility of the calling application to `free()` this memory.

It is by design, and not a coincidence, that the format and contents of the returned array matches that required for the third argument of the `execle(3)` function call.

### 3.1.15.2. RETURN VALUES

The `pam_getenvlist` function returns `NULL` on failure.

## 3.2. What is expected of an application

### 3.2.1. The conversation function

```
#include <security/pam_appl.h>

struct pam_message {
    int msg_style;
    const char *msg;
};

struct pam_response {
    char *resp;
    int resp_retcode;
};

struct pam_conv {
    int (*conv)(int num_msg, const struct pam_message **msg,
                struct pam_response **resp, void *appdata_ptr);
    void *appdata_ptr;
};
```

#### 3.2.1.1. DESCRIPTION

The PAM library uses an application-defined callback to allow a direct communication between a loaded module and the application. This callback is specified by the `struct pam_conv` passed to `pam_start(3)` at the start of the transaction.

When a module calls the referenced `conv()` function, the argument `appdata_ptr` is set to the second element of this structure.

The other arguments of a call to `conv()` concern the information exchanged by module and application. That is to say, `num_msg` holds the length of the array of pointers, `msg`. After a successful return, the pointer `resp` points to an array of `pam_response` structures, holding the application supplied text. The `resp_retcode` member of this struct is unused and should be set to zero. It is the caller's responsibility to release both, this array and the responses themselves, using `free(3)`. Note, `*resp` is a `struct pam_response` array and not an array of pointers.

The number of responses is always equal to the `num_msg` conversation function argument. This does require that the response array is `free(3)`'d after every call to the conversation function. The index of the responses corresponds directly to the prompt index in the `pam_message` array.

On failure, the conversation function should release any resources it has allocated, and return one of the predefined PAM error codes.

Each message can have one of four types, specified by the `msg_style` member of struct `pam_message`:

`PAM_PROMPT_ECHO_OFF`

Obtain a string without echoing any text.

`PAM_PROMPT_ECHO_ON`

Obtain a string whilst echoing text.

`PAM_ERROR_MSG`

Display an error message.

`PAM_TEXT_INFO`

Display some text.

The point of having an array of messages is that it becomes possible to pass a number of things to the application in a single call from the module. It can also be convenient for the application that related things come at once: a windows based application can then present a single form with many messages/prompts on at once.

In passing, it is worth noting that there is a discrepancy between the way Linux-PAM handles the `const struct pam_message **msg` conversation function argument and the way that Solaris' PAM (and derivatives, known to include HP/UX, are there others?) does. Linux-PAM interprets the `msg` argument as entirely equivalent to the following prototype `const struct pam_message *msg[]` (which, in spirit, is consistent with the commonly used prototypes for `argv` argument to the familiar `main()` function: `char **argv`; and `char *argv[]`). Said another way Linux-PAM interprets the `msg` argument as a pointer to an array of `num_msg` read only 'struct `pam_message`' pointers. Solaris' PAM implementation interprets this argument as a pointer to a pointer to an array of `num_msg` `pam_message` structures. Fortunately, perhaps, for most module/application developers when `num_msg` has a value of one these two definitions are entirely equivalent. Unfortunately, casually raising this number to two has led to unanticipated

compatibility problems.

For what its worth the two known module writer work-arounds for trying to maintain source level compatibility with both PAM implementations are:

- never call the conversation function with num\_msg greater than one.
- set up msg as doubly referenced so both types of conversation function can find the messages. That is, make

```
msg[n] = & (( *msg )[n])
```

### 3.2.1.2. RETURN VALUES

#### PAM\_BUF\_ERR

Memory buffer error.

#### PAM\_CONV\_ERR

Conversation failure. The application should not set \*resp.

#### PAM\_SUCCESS

Success.

### 3.3. Programming notes

Note, all of the authentication service function calls accept the token PAM\_SILENT, which instructs the modules to not send messages to the application. This token can be logically OR'd with any one of the permitted tokens specific to the individual function calls. PAM\_SILENT does not override the prompting of the user for passwords etc., it only stops informative messages from being generated.

## Chapter 4. Security issues of Linux-PAM

PAM, from the perspective of an application, is a convenient API for authenticating users. PAM modules generally have no increased privilege over that possessed by the application that is making use of it. For this reason, the application must take ultimate responsibility for protecting the environment in which PAM operates.

A poorly (or maliciously) written application can defeat any Linux-PAM module's authentication mechanisms by simply ignoring it's return values. It is the

applications task and responsibility to grant privileges and access to services. The Linux-PAM library simply assumes the responsibility of authenticating the user; ascertaining that the user is who they say they are. Care should be taken to anticipate all of the documented behavior of the Linux-PAM library functions. A failure to do this will most certainly lead to a future security breach.

#### 4.1. Care about standard library calls

In general, writers of authorization-granting applications should assume that each module is likely to call any or all 'libc' functions. For 'libc' functions that return pointers to static/dynamically allocated structures (ie. the library allocates the memory and the user is not expected to 'free()' it) any module call to this function is likely to corrupt a pointer previously obtained by the application. The application programmer should either re-call such a 'libc' function after a call to the Linux-PAM library, or copy the structure contents to some safe area of memory before passing control to the Linux-PAM library.

Two important function classes that fall into this category are `getpwnam(3)` and `syslog(3)`.

#### 4.2. Choice of a service name

When picking the service-name that corresponds to the first entry in the Linux-PAM configuration file, the application programmer should avoid the temptation of choosing something related to `argv[0]`. It is a trivial matter for any user to invoke any application on a system under a different name and this should not be permitted to cause a security breach.

In general, this is always the right advice if the program is `setuid`, or otherwise more privileged than the user that invokes it. In some cases, avoiding this advice is convenient, but as an author of such an application, you should consider well the ways in which your program will be installed and used. (Its often the case that programs are not intended to be `setuid`, but end up being installed that way for convenience. If your program falls into this category, don't fall into the trap of making this mistake.)

To invoke some target application by another name, the user may symbolically link the target application with the desired name. To be precise all the user need do is, `ln -s /target/application ./preferred_name` and then run `./preferred_name`.

By studying the Linux-PAM configuration file(s), an attacker can choose the `preferred_name` to be that of a service enjoying minimal protection; for example a game which uses Linux-PAM to restrict access to certain hours of the day. If



the service-name were to be linked to the filename under which the service was invoked, it is clear that the user is effectively in the position of dictating which authentication scheme the service uses. Needless to say, this is not a secure situation.

The conclusion is that the application developer should carefully define the service-name of an application. The safest thing is to make it a single hard-wired name.

#### 4.3. The conversation function

Care should be taken to ensure that the conv() function is robust. Such a function is provided in the library libpam\_misc (see below).

#### 4.4. The identity of the user

The Linux-PAM modules will need to determine the identity of the user who requests a service, and the identity of the user who grants the service. These two users will seldom be the same. Indeed there is generally a third user identity to be considered, the new (assumed) identity of the user once the service is granted.

The need for keeping tabs on these identities is clearly an issue of security. One convention that is actively used by some modules is that the identity of the user requesting a service should be the current UID (user ID) of the running process; the identity of the privilege granting user is the EUID (effective user ID) of the running process; the identity of the user, under whose name the service will be executed, is given by the contents of the PAM\_USER pam\_get\_item(3). Note, modules can change the values of PAM\_USER and PAM\_RUSER during any of the pam\_\*(\*) library calls. For this reason, the application should take care to use the pam\_get\_item() every time it wishes to establish who the authenticated user is (or will currently be).

For network-serving databases and other applications that provide their own security model (independent of the OS kernel) the above scheme is insufficient to identify the requesting user.

A more portable solution to storing the identity of the requesting user is to use the PAM\_RUSER pam\_get\_item(3). The application should supply this value before attempting to authenticate the user with pam\_authenticate(). How well this name can be trusted will ultimately be at the discretion of the local administrator (who configures PAM for your application) and a selected module may attempt to override the value where it can obtain more reliable data. If an application is unable to determine the identity of the requesting entity/user, it should not call pam\_set\_item(3) to set PAM\_RUSER.

In addition to the PAM\_RUSER item, the application should supply the PAM\_RHOST (requesting host) item. As a general rule, the following convention for its value can be assumed: NULL = unknown; localhost = invoked directly from the local system; other.place.xyz = some component of the user's connection originates from this remote/requesting host. At present, PAM has no established convention for indicating whether the application supports a trusted path to communication from this host.

#### 4.5. Sufficient resources

Care should be taken to ensure that the proper execution of an application is not compromised by a lack of system resources. If an application is unable to open sufficient files to perform its service, it should fail gracefully, or request additional resources. Specifically, the quantities manipulated by the setrlimit(2) family of commands should be taken into consideration.

This is also true of conversation prompts. The application should not accept prompts of arbitrary length without checking for resource allocation failure and dealing with such extreme conditions gracefully and in a manner that preserves the PAM API. Such tolerance may be especially important when attempting to track a malicious adversary.

### Chapter 5. A library of miscellaneous helper functions

To aid the work of the application developer a library of miscellaneous functions is provided. It is called libpam\_misc, and contains a text based conversation function, and routines for enhancing the standard PAM-environment variable support.

The functions, structures and macros, made available by this library can be defined by including <security/pam\_misc.h>. It should be noted that this library is specific to Linux-PAM and is not referred to in the defining DCE-RFC (see See also) below.

#### 5.1. Functions supplied

##### 5.1.1. Text based conversation function

```
#include <security/pam_misc.h>
```

```
int misc_conv( num_msg,  
              msgm,  
              response,  
              appdata_ptr);
```

```
int num_msg;
const struct pam_message **msgm;
struct pam_response **response;
void *appdata_ptr;
```

#### 5.1.1.1. DESCRIPTION

The `misc_conv` function is part of `libpam_misc` and not of the standard `libpam` library. This function will prompt the user with the appropriate comments and obtain the appropriate inputs as directed by authentication modules.

In addition to simply slotting into the appropriate `pam_conv(3)`, this function provides some time-out facilities. The function exports five variables that can be used by an application programmer to limit the amount of time this conversation function will spend waiting for the user to type something. The five variables are as follows:

```
time_t pam_misc_conv_warn_time;
```

This variable contains the time (as returned by `time(2)`) that the user should be first warned that the clock is ticking. By default it has the value 0, which indicates that no such warning will be given. The application may set its value to sometime in the future, but this should be done prior to passing control to the Linux-PAM library.

```
const char *pam_misc_conv_warn_line;
```

Used in conjunction with `pam_misc_conv_warn_time`, this variable is a pointer to the string that will be displayed when it becomes time to warn the user that the timeout is approaching. Its default value is a translated version of "...Time is running out...", but this can be changed by the application prior to passing control to Linux-PAM.

```
time_t pam_misc_conv_die_time;
```

This variable contains the time (as returned by `time(2)`) that the will time out. By default it has the value 0, which indicates that the conversation function will not timeout. The application may set its value to sometime in the future, but this should be done prior to passing control to the Linux-PAM library.

```
const char *pam_misc_conv_die_line;
```

Used in conjunction with `pam_misc_conv_die_time`, this variable is a pointer to the string that will be displayed when the conversation times out. Its

default value is a translated version of “...Sorry, your time is up!”, but this can be changed by the application prior to passing control to Linux-PAM.

```
int pam_misc_conv_died;
```

Following a return from the Linux-PAM library, the value of this variable indicates whether the conversation has timed out. A value of 1 indicates the time-out occurred.

The following two function pointers are available for supporting binary prompts in the conversation function. They are optimized for the current incarnation of the libpamc library and are subject to change.

```
int (*pam_binary_handler_fn)(void *appdata, pamc_bp_t *prompt_p);
```

This function pointer is initialized to NULL but can be filled with a function that provides machine-machine (hidden) message exchange. It is intended for use with hidden authentication protocols such as RSA or Diffie-Hellman key exchanges. (This is still under development.)

```
int (*pam_binary_handler_free)(void *appdata, pamc_bp_t *delete_me);
```

This function pointer is initialized to PAM\_BP\_RENEW(delete\_me, 0, 0), but can be redefined as desired by the application.

### 5.1.2. Transcribing an environment to that of PAM

```
#include <security/pam_misc.h>
```

```
int pam_misc_paste_env( pamh,  
                      user);
```

```
pam_handle_t *pamh;  
const char * const *user;
```

#### 5.1.2.1. DESCRIPTION

This function takes the supplied list of environment pointers and uploads its contents to the PAM environment. Success is indicated by PAM\_SUCCESS.

### 5.1.3. Liberating a locally saved environment

```
#include <security/pam_misc.h>
```

```
int pam_misc_drop_env( env);
```

```
char **env;
```

#### 5.1.3.1. DESCRIPTION

This function is defined to complement the `pam_getenvlist(3)` function. It liberates the memory associated with `env`, overwriting with 0 all memory before `free()`ing it.

#### 5.1.4. BSD like PAM environment variable setting

```
#include <security/pam_misc.h>
```

```
int pam_misc_setenv( pamh,  
                    name,  
                    value,  
                    readonly);
```

```
pam_handle_t *pamh;  
const char *name;  
const char *value;  
int readonly;
```

#### 5.1.4.1. DESCRIPTION

This function performs a task equivalent to `pam_putenv(3)`, its syntax is, however, more like the BSD style function; `setenv()`. The name and value are concatenated with an '=' to form a name=value and passed to `pam_putenv()`. If, however, the PAM variable is already set, the replacement will only be applied if the last argument, `readonly`, is zero.

### Chapter 6. Porting legacy applications

The point of PAM is that the application is not supposed to have any idea how the attached authentication modules will choose to authenticate the user.

So

all they can do is provide a conversation function that will talk directly to the user(client) on the modules' behalf.

Consider the case that you plug a retinal scanner into the login program. In this situation the user would be prompted: "please look into the scanner". No username or password would be needed - all this information could be deduced from the scan and a database lookup. The point is that the retinal scanner is an ideal task for a "module".

While it is true that a pop-daemon program is designed with the POP protocol in mind and no-one ever considered attaching a retinal scanner to it, it is also the case that the "clean" PAM'ification of such a daemon would allow for the possibility of a scanner module being attached to it. The point being that the "standard" pop-authentication protocol(s) [which will be needed to satisfy inflexible/legacy clients] would be supported by inserting an appropriate pam\_qpopper module(s). However, having rewritten popd once in this way any new protocols can be implemented in-situ.

One simple test of a ported application would be to insert the pam\_permit module and see if the application demands you type a password... In such a case, xlock would fail to lock the terminal - or would at best be a screen-saver, ftp would give password free access to all etc.. Neither of these is a very secure thing to do, but they do illustrate how much flexibility PAM puts in the hands of the local admin.

The key issue, in doing things correctly, is identifying what is part of the authentication procedure (how many passwords etc..) the exchange protocol (prefixes to prompts etc., numbers like 331 in the case of ftpd) and what is part of the service that the application delivers. PAM really needs to have total control in the authentication "procedure", the conversation function should only deal with reformatting user prompts and extracting responses from raw input.

## Chapter 7. Glossary of PAM related terms

The following are a list of terms used within this document.

### Authentication token

Generally, this is a password. However, a user can authenticate him/herself in a variety of ways. Updating the user's authentication token thus corresponds to refreshing the object they use to authenticate themselves with the system. The word password is avoided to keep open the possibility that the authentication involves a retinal scan or other non-textual mode of challenge/response.

### Credentials

Having successfully authenticated the user, PAM is able to establish certain characteristics/attributes of the user. These are termed credentials. Examples of which are group memberships to perform privileged tasks with, and tickets in the form of environment variables etc. . Some user-credentials, such as the user's UID and GID (plus default group memberships) are not deemed to be PAM-credentials. It is the responsibility of the application to grant these directly.

## Chapter 8. An example application

To get a flavor of the way a Linux-PAM application is written we include the following example. It prompts the user for their password and indicates whether their account is valid on the standard output, its return code also indicates the success (0 for success; 1 for failure).

```
/*
This program was contributed by Shane Watts
[modifications by AGM and kukuk]

You need to add the following (or equivalent) to the
/etc/pam.d/check_user file:
# check authorization
auth    required  pam_unix.so
account required  pam_unix.so
*/

#include <security/pam_appl.h>
#include <security/pam_misc.h>
#include <stdio.h>

static struct pam_conv conv = {
    misc_conv,
    NULL
};

int main(int argc, char *argv[])
{
    pam_handle_t *pamh=NULL;
    int retval;
    const char *user="nobody";

    if(argc == 2) {
        user = argv[1];
    }

    if(argc > 2) {
        fprintf(stderr, "Usage: check_user [username]\n");
        exit(1);
    }

    retval = pam_start("check_user",
user, &conv, &pamh);

    if (retval == PAM_SUCCESS)
```

```

    retval = pam_authenticate(pamh, 0); /* is user really user? */

if (retval == PAM_SUCCESS)
    retval = pam_acct_mgmt(pamh, 0); /* permitted access? */

/* This is where we have been authorized or not. */

if (retval == PAM_SUCCESS) {
    fprintf(stdout, "Authenticated\n");
} else {
    fprintf(stdout, "Not Authenticated\n");
}

if (pam_end(pamh,retval) != PAM_SUCCESS) { /* close Linux-PAM */
    pamh = NULL;
    fprintf(stderr, "check_user: failed to release authenticator\n");
    exit(1);
}

return ( retval == PAM_SUCCESS ? 0:1 ); /* indicate success */
}

```

## Chapter 9. Files

/usr/include/security/pam\_appl.h

Header file with interfaces for Linux-PAM applications.

/usr/include/security/pam\_misc.h

Header file for useful library functions for making applications easier to write.

## Chapter 10. See also

- The Linux-PAM System Administrators' Guide.
- The Linux-PAM Module Writers' Guide.
- The V. Samar and R. Schemers (SunSoft), ``UNIFIED LOGIN WITH PLUGGABLE AUTHENTICATION MODULES'', Open Software Foundation Request For Comments 86.0, October 1995.

## Chapter 11. Author/acknowledgments



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```
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```
</pre><pre class="programlisting">
```

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</pre></div><div class="navfooter"><hr><table width="100%" summary="Navigation footer"><tr><td width="40%" align="left"><a accesskey="p" href="sag-author.html">Prev</a> </td><td width="20%" align="center"> </td><td width="40%" align="right"> </td></tr><tr><td width="40%" align="left" valign="top">Chapter 8. Author/acknowledgments </td><td width="20%" align="center"><a accesskey="h" href="Linux-PAM_SAG.html">Home</a></td><td width="40%" align="right" valign="top"> </td></tr></table></div></body></html>
```

Found in path(s):

\* /opt/cola/permits/1822720343\_1704297183.37862/0/linux-pam-1-5-3-docs-tar-xz/Linux-PAM-1.5.3/doc/sag/html/sag-copyright.html

## 1.160 python-setuptools 65.5.0

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Python was created in the early 1990s by Guido van Rossum at Stichting Mathematisch Centrum (CWI, see <http://www.cwi.nl>) in the Netherlands as a successor of a language called ABC. Guido remains Python's principal author, although it includes many contributions from others.

In 1995, Guido continued his work on Python at the Corporation for National Research Initiatives (CNRI, see <http://www.cnri.reston.va.us>) in Reston, Virginia where he released several versions of the software.

In May 2000, Guido and the Python core development team moved to BeOpen.com to form the BeOpen PythonLabs team. In October of the same year, the PythonLabs team moved to Digital Creations (now Zope Corporation, see <http://www.zope.com>). In 2001, the Python Software Foundation (PSF, see <http://www.python.org/psf/>) was formed, a non-profit organization created specifically to own Python-related Intellectual Property. Zope Corporation is a sponsoring member of the PSF.

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0.9.0 thru 1.2		1991-1995	CWI	yes
1.3 thru 1.5.2	1.2	1995-1999	CNRI	yes
1.6	1.5.2	2000	CNRI	no
2.0	1.6	2000	BeOpen.com	no
1.6.1	1.6	2001	CNRI	yes (2)
2.1	2.0+1.6.1	2001	PSF	no
2.0.1	2.0+1.6.1	2001	PSF	yes
2.1.1	2.1+2.0.1	2001	PSF	yes
2.1.2	2.1.1	2002	PSF	yes
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```

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## 1.161 python-certifi 2023.07.22

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This package contains a modified version of ca-bundle.crt:

ca-bundle.crt -- Bundle of CA Root Certificates

Certificate data from Mozilla as of: Thu Nov 3 19:04:19 2011#

This is a bundle of X.509 certificates of public Certificate Authorities

(CA). These were automatically extracted from Mozilla's root certificates file (certdata.txt). This file can be found in the mozilla source tree:  
<https://hg.mozilla.org/mozilla-central/file/tip/security/nss/lib/ckfw/builtins/certdata.txt>  
It contains the certificates in PEM format and therefore can be directly used with curl / libcurl / php\_curl, or with an Apache+mod\_ssl webserver for SSL client authentication.  
Just configure this file as the SSLCACertificateFile.#

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@(#) \$RCSfile: certdata.txt,v

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ca-bundle.crt -- Bundle of CA Root Certificates

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<http://mxr.mozilla.org/mozilla/source/security/nss/lib/ckfw/builtins/certdata.txt?raw=1#>

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@(#) \$RCSfile: certdata.txt,v \$

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## 1.164 pgzip 1.2.5

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## 1.166 python-pip 23.3.1

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This package contains a modified version of ca-bundle.crt:

ca-bundle.crt -- Bundle of CA Root Certificates

Certificate data from Mozilla as of: Thu Nov 3 19:04:19 2011#

This is a bundle of X.509 certificates of public Certificate Authorities (CA). These were automatically extracted from Mozilla's root certificates file (certdata.txt). This file can be found in the mozilla source tree:

<https://hg.mozilla.org/mozilla-central/file/tip/security/nss/lib/ckfw/builtins/certdata.txt>

It contains the certificates in PEM format and therefore can be directly used with curl / libcurl / php\_curl, or with an Apache+mod\_ssl webserver for SSL client authentication.

Just configure this file as the SSLCACertificateFile.#

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@(#) \$RCSfile: certdata.txt,v

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A. HISTORY OF THE SOFTWARE

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Python was created in the early 1990s by Guido van Rossum at Stichting

Mathematisch Centrum (CWI, see <https://www.cwi.nl>) in the Netherlands as a successor of a language called ABC. Guido remains Python's principal author, although it includes many contributions from others.

In 1995, Guido continued his work on Python at the Corporation for National Research Initiatives (CNRI, see <https://www.cnri.reston.va.us>) in Reston, Virginia where he released several versions of the software.

In May 2000, Guido and the Python core development team moved to BeOpen.com to form the BeOpen PythonLabs team. In October of the same year, the PythonLabs team moved to Digital Creations, which became Zope Corporation. In 2001, the Python Software Foundation (PSF, see <https://www.python.org/psf/>) was formed, a non-profit organization created specifically to own Python-related Intellectual Property. Zope Corporation was a sponsoring member of the PSF.

All

Python releases are Open Source (see <https://opensource.org> for the Open Source Definition). Historically, most, but not all, Python releases have also been GPL-compatible; the table below summarizes the various releases.

Release	Derived from	Year	Owner	GPL-compatible? (1)
0.9.0 thru 1.2		1991-1995	CWI	yes
1.3 thru 1.5.2	1.2	1995-1999	CNRI	yes
1.6	1.5.2	2000	CNRI	no
2.0	1.6	2000	BeOpen.com	no
1.6.1	1.6	2001	CNRI	yes (2)
2.1	2.0+1.6.1	2001	PSF	no
2.0.1	2.0+1.6.1	2001	PSF	yes
2.1.1	2.1+2.0.1	2001	PSF	yes
2.1.2	2.1.1	2002	PSF	yes
2.1.3	2.1.2	2002	PSF	yes
2.2 and above	2.1.1	2001-now	PSF	yes

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because its license has a choice of law clause. According to CNRI, however, Stallman's lawyer has told CNRI's lawyer that 1.6.1 is "not incompatible" with the GPL.

Thanks to the many outside volunteers who have worked under Guido's direction to make these releases possible.

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### A. HISTORY OF THE SOFTWARE

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Python was created in the early 1990s by Guido van Rossum at Stichting Mathematisch Centrum (CWI, see <http://www.cwi.nl>) in the Netherlands as a successor of a language called ABC. Guido remains Python's principal author, although it includes many contributions from others.

In 1995, Guido continued his work on Python at the Corporation for National Research Initiatives (CNRI, see <http://www.cnri.reston.va.us>) in Reston, Virginia where he released several versions of the software.

In May 2000, Guido and the Python core development team moved to BeOpen.com to form the BeOpen PythonLabs team. In October of the same year, the PythonLabs team moved to Digital Creations (now Zope Corporation, see <http://www.zope.com>). In 2001, the Python Software Foundation (PSF, see <http://www.python.org/psf/>) was formed, a non-profit organization created specifically to own Python-related Intellectual Property. Zope Corporation is a sponsoring member of the PSF.

All Python releases are Open Source (see <http://www.opensource.org> for the Open Source Definition). Historically, most, but not all, Python releases have also been GPL-compatible; the table below summarizes the various releases.

Release	Derived from	Year	Owner	GPL-compatible? (1)
0.9.0 thru 1.2		1991-1995	CWI	yes
1.3 thru 1.5.2	1.2	1995-1999	CNRI	yes
1.6	1.5.2	2000	CNRI	no
2.0	1.6	2000	BeOpen.com	no
1.6.1	1.6	2001	CNRI	yes (2)
2.1	2.0+1.6.1	2001	PSF	no
2.0.1	2.0+1.6.1	2001	PSF	yes
2.1.1	2.1+2.0.1	2001	PSF	yes
2.2	2.1.1	2001	PSF	yes
2.1.2	2.1.1	2002	PSF	yes
2.1.3				
2.1.2	2002	PSF	yes	
2.2.1	2.2	2002	PSF	yes
2.2.2	2.2.1	2002	PSF	yes
2.2.3	2.2.2	2003	PSF	yes
2.3	2.2.2	2002-2003	PSF	yes
2.3.1	2.3	2002-2003	PSF	yes
2.3.2	2.3.1	2002-2003	PSF	yes
2.3.3	2.3.2	2002-2003	PSF	yes

2.3.4	2.3.3	2004	PSF	yes
2.3.5	2.3.4	2005	PSF	yes
2.4	2.3	2004	PSF	yes
2.4.1	2.4	2005	PSF	yes
2.4.2	2.4.1	2005	PSF	yes
2.4.3	2.4.2	2006	PSF	yes
2.4.4	2.4.3	2006	PSF	yes
2.5	2.4	2006	PSF	yes
2.5.1	2.5	2007	PSF	yes
2.5.2	2.5.1	2008	PSF	yes
2.5.3	2.5.2	2008	PSF	yes
2.6	2.5	2008	PSF	yes
2.6.1	2.6	2008	PSF	yes
2.6.2	2.6.1	2009	PSF	yes
2.6.3	2.6.2	2009	PSF	yes
2.6.4	2.6.3	2009	PSF	yes
2.6.5	2.6.4	2010	PSF	yes
3.0	2.6	2008	PSF	yes
3.0.1	3.0	2009	PSF	yes
3.1	3.0.1	2009	PSF	yes
3.1.1	3.1	2009	PSF	yes
3.1.2	3.1	2010	PSF	yes
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Version 3.1, 31 March 2009

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Julian Seward, [jseward@bzip.org](mailto:jseward@bzip.org)  
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Version 3.1, 31 March 2009

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<code>mach_override</code>	<code>lib/interception/mach_override</code>
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Accompany it with a written offer, valid for at least three years, to give any third party, for a charge no more than your cost of physically performing source distribution, a complete machine-readable copy of the corresponding source code, to be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,

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The source code for a work means the preferred form of the work for making modifications to it. For an executable work, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the executable. However, as a special exception, the source code distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

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@heading END OF TERMS AND CONDITIONS  
@end iftex  
@ifinfo  
@center END OF TERMS AND CONDITIONS

@end ifinfo

@page  
@heading Appendix: How to Apply These Terms to Your New Programs

If you develop a new program, and you want it to be of the greatest possible use to the public, the best way to achieve this is to make it free software which everyone can redistribute and change under these terms.

To do so, attach the following notices to the program. It is safest to attach them to the start of each source file to most effectively convey the exclusion of warranty; and each file should have at least the ``copyright" line and a pointer to where the full notice is found.

```
@smallexample
@var{one line to give the program's name
and a brief idea of what it does.}
Copyright (C) @var{yyyy} @var{name of author}
```

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@end smallexample

Also add information on how to contact you by electronic and paper mail.

If the program is interactive, make it output a short notice like this when it starts in an interactive mode:

```
@smallexample
Gnomovision version
69, Copyright (C) @var{year} @var{name of author}
Gnomovision comes with ABSOLUTELY NO WARRANTY; for details type `show w'.
This is free software, and you are welcome to redistribute it
under certain conditions; type `show c' for details.
@end smallexample
```

The hypothetical commands @samp{show w} and @samp{show c} should show the appropriate parts of the General Public License. Of course, the commands you use may be called something other than @samp{show w} and @samp{show c}; they could even be mouse-clicks or menu items---whatever suits your program.

You should also get your employer (if you work as a programmer) or your school, if any, to sign a ``copyright disclaimer" for the program, if necessary. Here is a sample; alter the names:

@example

Yoyodyne, Inc., hereby disclaims all copyright interest in the program  
`Gnomovision' (which makes passes at compilers) written by James Hacker.

@var{signature of Ty Coon}, 1 April 1989

Ty Coon, President of Vice

@end example

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The gettext-runtime package is partially under the LGPL and partially under the GPL.

The following parts are under the LGPL, see file intl/COPYING.LIB:

- the libintl and libasprintf libraries and their header files,

- the libintl.jar Java library,
- the GNU.Gettext.dll C# library,
- the gettext.sh shells script function library.

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- the \_programs\_ gettext, ngettext, envsubst,
- the documentation.

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Version 2.1, February 1999

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We protect your rights with a two-step method: (1) we copyright the library, and (2) we offer you this license, which gives you legal permission to copy, distribute and/or modify the library.

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In other cases, permission to use a particular library in non-free programs enables a greater number of people to use a large body of free software. For example, permission to use the GNU C Library in non-free programs enables many more people to use the whole GNU operating system, as well as its variant, the GNU/Linux operating system.

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2. You may modify your copy or copies of the Library or any portion of it, thus forming a work based on the Library, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:

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- b) You must cause the files modified to carry prominent notices stating that you changed the files and the date of any change.
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(For example, a function in a library to compute square roots has a purpose that is entirely well-defined independent of the application. Therefore, Subsection 2d requires that any application-supplied function or table used by this function must be optional: if the application does not supply it, the square root function must still compute square roots.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Library, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Library, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

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If such an object file uses only numerical parameters, data structure layouts and accessors, and small macros and small inline functions (ten lines or less in length), then the use of the object file is unrestricted, regardless of whether it is legally a derivative work. (Executables containing this object code plus portions of the

Library will still fall under Section 6.)

Otherwise, if the work is a derivative of the Library, you may distribute

the object code for the work under the terms of Section 6.

Any executables containing that work also fall under Section 6, whether or not they are linked directly with the Library itself.

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6. As an exception to the Sections above, you may also combine or link a "work that uses the Library" with the Library to produce a work containing portions of the Library, and distribute that work under terms of your choice, provided that the terms permit modification of the work for the customer's own use and reverse engineering for debugging such modifications.

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a) Accompany the work with the complete corresponding machine-readable source code for the Library including whatever changes were used in the work (which must be distributed under Sections 1 and 2 above); and, if the work is an executable linked with the Library, with the complete machine-readable "work that uses the Library", as object code and/or source code, so that the user can modify the Library and then relink to produce a modified executable containing the modified Library. (It is understood that the user who changes the contents of definitions files in the Library will not necessarily be able to recompile the application to use the modified definitions.)

b) Use a suitable shared library mechanism for linking with the Library. A suitable mechanism is one that (1) uses at run time a copy of the library already present on the user's computer system, rather than copying library functions into the executable, and (2) will operate properly with a modified version of the library, if the user installs one, as long as the modified version is interface-compatible with the version that the work was made with.

c) Accompany the work with a written offer, valid for at least three years, to give the same user the materials specified in Subsection 6a, above, for a charge no more

than the cost of performing this distribution.

d) If distribution of the work is made by offering access to copy from a designated place, offer equivalent access to copy the above specified materials from the same place.

e) Verify that the user has already received a copy of these materials or that you have already sent this user a copy.

For an executable, the required form of the "work that uses the Library" must include any data and utility programs needed for reproducing the executable from it. However, as a special exception, the materials to be distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

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facilities. This must be distributed under the terms of the Sections above.

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## 1.173 json2xml 3.19.0

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```
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```

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# 1.177 x-xerrors 0.0.0-20231012003039-104605ab7028

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## 1.182 py3-setuptools-pyc 68.2.2-r0

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In 1995, Guido continued his work on Python at the Corporation for National Research Initiatives (CNRI, see <http://www.cnri.reston.va.us>) in Reston, Virginia where he released several versions of the software.

In May 2000, Guido and the Python core development team moved to BeOpen.com to form the BeOpen PythonLabs team. In October of the same year, the PythonLabs team moved to Digital Creations (now Zope Corporation, see <http://www.zope.com>). In 2001, the Python Software Foundation (PSF, see <http://www.python.org/psf/>) was formed, a



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#### A. HISTORY OF THE SOFTWARE

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Python was created in the early 1990s by Guido van Rossum at Stichting Mathematisch Centrum (CWI, see <http://www.cwi.nl>) in the Netherlands as a successor of a language called ABC. Guido remains Python's principal author, although it includes many contributions from others.

In 1995, Guido continued his work on Python at the Corporation for National Research Initiatives (CNRI, see <http://www.cnri.reston.va.us>) in Reston, Virginia where he released several versions of the software.

In May 2000, Guido and the Python core development team moved to BeOpen.com to form the BeOpen PythonLabs team. In October of the same year, the PythonLabs team moved to Digital Creations, which became Zope Corporation. In 2001, the Python Software Foundation (PSF, see <https://www.python.org/psf/>) was formed, a non-profit organization created specifically to own Python-related Intellectual Property. Zope Corporation was a sponsoring member of the PSF.

All

Python releases are Open Source (see <http://www.opensource.org> for the Open Source Definition). Historically, most, but not all, Python releases have also been GPL-compatible; the table below summarizes the various releases.

Release	Derived from	Year	Owner	GPL-compatible? (1)
0.9.0 thru 1.2		1991-1995	CWI	yes
1.3 thru 1.5.2	1.2	1995-1999	CNRI	yes
1.6	1.5.2	2000	CNRI	no
2.0	1.6	2000	BeOpen.com	no
1.6.1	1.6	2001	CNRI	yes (2)
2.1	2.0+1.6.1	2001	PSF	no
2.0.1	2.0+1.6.1	2001	PSF	yes
2.1.1	2.1+2.0.1	2001	PSF	yes
2.1.2	2.1.1	2002	PSF	yes
2.1.3	2.1.2	2002	PSF	yes

2.2 and above 2.1.1 2001-now  
PSF yes

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(2) According to Richard Stallman, 1.6.1 is not GPL-compatible, because its license has a choice of law clause. According to CNRI, however, Stallman's lawyer has told CNRI's lawyer that 1.6.1 is "not incompatible" with the GPL.

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```
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```

Please avoid changing it manually.

You can report issues or suggest changes directly to `validate-pyproject` (or to the relevant plugin repository)

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`fastjsonschema`

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`validate-pyproject`

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## 1.188 go-humanize 1.0.1

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## 1.189 dsnet-compress 0.0.2- 0.20210315054119-f66993602bf5

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# 1.190 hashicorp-go-version 1.2.1

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## 1.191 sarama 1.42.1

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## 1.193 alpine-baselayout 3.4.3-r2

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```
# Automatically generated by apkbuild-cpan, template 3
# Contributor: Valery Kartel <valery.kartel@gmail.com>
# Maintainer: Celeste <cielesti@protonmail.com>
pkgname=perl-bsd-resource
#_pkgreal is used by apkbuild-cpan to find modules at MetaCpan
_pkgreal=BSD-Resource
pkgver=1.2911
pkgrel=9
pkgdesc="Perl extension implements the BSD process resource limit functions"
url="https://metacpan.org/release/BSD-Resource/"
arch="all"
license="Artistic-2.0 OR LGPL-2.0"
depends="perl"
makedepends="perl-dev"
subpackages="$pkgname-doc"
source="https://cpan.metacpan.org/authors/id/J/JH/JHI/BSD-Resource-$pkgver.tar.gz"
builddir="$srcdir/${_pkgreal}-$pkgver"

build() {
    export CFLAGS=$(perl -MConfig -E 'say $Config{ccflags}')
    PERL_MM_USE_DEFAULT=1 perl -I. Makefile.PL INSTALLDIRS=vendor
    make
}

check() {
    export CFLAGS=$(perl -MConfig -E 'say $Config{ccflags}')
    make test
```

```

}

package() {
    make DESTDIR="$pkgdir" install
    find "$pkgdir" \( -name perllocal.pod -o -name .packlist \) -delete
}

sha512sums="
d0032d41c7c0468ed1c6d8f57b885f6cb97a5039d754c8cb60b2067daedaf53bd15fb6561a3d0f828df16dfa5417f663b
8065ba65f4fea16dc9262728b3b6b85
    BSD-Resource-1.2911.tar.gz
"
# Contributor: Dhruvin Gandhi <contact@dhruvin.dev>
# Maintainer: Patrycja Rosa <alpine@ptrcnull.me>
pkgname=py3-license-expression
_pkgname=license-expression
pkgver=30.2.0
pkgrel=0
pkgdesc="Library to parse, compare, simplify and normalize license expressions"
url="https://github.com/nexB/license-expression"
arch="noarch"
license="Apache-2.0"
depends="python3 py3-boolean.py"
makedepends="py3-setuptools py3-setuptools_scm py3-gpep517 py3-wheel"
checkdepends="py3-pytest py3-pytest-xdist"
subpackages="$pkgname-pyc"
source="https://files.pythonhosted.org/packages/source/l/${_pkgname}/${_pkgname}-${pkgver}.tar.gz"
builddir="$srcdir/${_pkgname}-${pkgver}"

build() {
    gpep517 build-wheel \
        --wheel-dir .dist \
        --output-fd 3 3>&1 >&2
}

check() {
    python3 -m venv --clear --without-pip --system-site-packages .testenv
    .testenv/bin/python3 -m installer .dist/*.whl
    .testenv/bin/python3 -m pytest
}

package() {
    python3 -m installer -d "$pkgdir" \
        .dist/*.whl
}

sha512sums="
7be7ebab1d980063ab846a228c5247570d0e23ed52f4362ef7d88eb7a59274e6f74653b4e9cff8225597693087d750c5

```

bf7fcf604440d8d3d2976ebcd7442c24

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"

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The X-Spline code was written Carole Blanc (blanc@labri.u-bordeaux.fr) and Christophe Schlick (schlick@labri.u-bordeaux.fr) starting from an initial implementation done by C. Feuille, S. Grosbois, L. Maziere and L. Minihot as a student practice (Universite Bordeaux, France). For additional information about X-splines, see:

"X-Splines: A Spline Model Designed for the End User" by C. Blanc and C. Schlick, Proceedings of SIGGRAPH'95  
<http://dept-info.labri.u-bordeaux.fr/~schlick/DOC/sig1.html>

# Maintainer: Jakub Panek <me@panekj.dev>

pkgname=cargo-license

pkgver=0.5.1

pkgrel=4

pkgdesc="Cargo subcommand to see license of dependencies"

url="https://github.com/onur/cargo-license"

arch="all !s390x !riscv64" # rust

license="MIT"

makedepends="cargo cargo-auditable"

source="\$pkgname-\$pkgver.tar.gz::https://crates.io/api/v1/crates/cargo-license/\$pkgver/download"

```
prepare() {
```

```
    default_prepare
```

```
    cargo fetch --target="$CTARGET" --locked
```

```

}

build() {
    cargo auditable build --release --frozen
}

check() {
    cargo test --frozen
}

package() {
    install -Dm755 target/release/cargo-license -t "$pkgdir"/usr/bin
}

sha512sums="
4d8d430df91c6aac53d2305d3125eae492324e85c4db29d33d452b3848f33a55088e71247c6c72c6a62f4e924a374a
115bf14b4f398e7950b9eb52415f2244 cargo-license-0.5.1.tar.gz
"

# Contributor: Maxim Karasev <begs@disroot.org>
# Maintainer: mio <miyopan@e.email>
pkgname=bsd-games
pkgver=3.3
pkgrel=1
pkgdesc="traditional text mode games from BSD"
url="https://bsd-games.sourceforge.io/"
arch="all"
license="BSD-3-Clause"
install="$pkgname.post-install"
makedepends="ncurses-dev coreutils" # configure causes busybox expr error
subpackages="$pkgname-doc"
source="https://sourceforge.net/projects/bsd-games/files/bsd-games-$pkgver.tar.gz"
options="!check" # no tests

build() {
    # some GNU autoconf options are ignored, but it works
    ./configure \
        --build=$CBUILD \
        --host=$CHOST \
        --prefix=/usr \
        --sysconfdir=/etc \
        --mandir=/usr/share/man \
        --localstatedir=/var/lib # it really shouldn't be in /var
    make
}

package() {
    make DESTDIR="$pkgdir" install
    install -Dm644 LICENSE "$pkgdir"/usr/share/licenses/bsd-games/LICENSE
}

```

```

}

sha512sums="
aaf36d09d4fe68514a5c279063d7e77a9a9a84c447037cba974b29faa07eb80c2aab2379d0699c196b5c27ffe1b2bb2c6
8d3390143e0e62d5e3d210ccfb61294
  bsd-games-3.3.tar.gz
"
# Contributor: Carlo Landmeter <clandmeter@alpinelinux.org>
# Maintainer: Kevin Daudt <kdaudt@alpinelinux.org>
pkgname=spdx-licenses
pkgver=3.22
pkgrel=0
pkgdesc="Various data formats for the SPDX License List"
url="https://spdx.org/"
arch="noarch"
options="!check" # no test suite
license="CC-BY-3.0"
source="license-list-data-$pkgver.tar.gz::https://github.com/spdx/license-list-data/archive/v$pkgver.tar.gz"
builddir="$srcdir/license-list-data-$pkgver"
subpackages="$pkgname-list"

_types="html json rdfa rdft rdfturtle rdfxml template text"

for type in $_types; do
  subpackages="$subpackages $pkgname-$type:_subpkg"
done

package() {
  mkdir -p "$pkgdir"
}

_subpkg() {
  local type=${subpkgname/$pkgname-/}
  pkgdesc="$pkgdesc ($type)"
  install_if="$pkgname"
  mkdir -p "$subpkgdir"/usr/share/spdx
  cp -r "$builddir"/$type "$subpkgdir"/usr/share/spdx/
}

list() {
  pkgdesc="$pkgdesc (licence list)"
  mkdir -p "$subpkgdir"/usr/share/spdx
  local i; for i in "$builddir"/text/*.txt; do
    local license=${i##*/}
    echo
    ${license%.*} >> "$subpkgdir"/usr/share/spdx/license.lst
  done
}

```

sha512sums="
b213fe66699770d75a4c994a01a5c08325751423516c2fb871088a47e7e7ce605736064f5ce3a63dc1d3c462271832db
7bc464ac968df1888f9823787964c786 license-list-data-3.22.tar.gz
"

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pkgname=py3-flake8-copyright
_pkgname=flake8-copyright
pkgver=0.2.4
pkgrel=1
pkgdesc="Extension for flake8 which checks for copyrights"
options="!check" # No testsuite
url="https://github.com/savoirfairelinux/flake8-copyright"
arch="noarch"
license="MIT"
depends="py3-flake8 py3-setuptools"
subpackages="$pkgname-pyc"
source="https://files.pythonhosted.org/packages/source/${_pkgname:0:1}/${_pkgname}/${_pkgname}-${pkgver}.tar.gz"
builddir="$srcdir"/$_pkgname-$pkgver

replaces="py-flake8-copyright" # Backwards compatibility
provides="py-flake8-copyright=$pkgver-r$pkgrel" # Backwards compatibility

build() {
    python3 setup.py build
}

package() {
    python3 setup.py install --skip-build --root="$pkgdir"
}

sha512sums="
a6ab47e1bb715618f075c51f398e18180404871b3b0faf1c2d30701d5203db6bc23771bf22ffb5bafcd8ee856b9b64237
b316bd503ae7dceed6ca284ccd5a74d flake8-copyright-0.2.4.tar.gz
"

# Maintainer: Natanael Copa <ncopa@alpinelinux.org>
pkgname=libart-lgpl
pkgver=2.3.21
pkgrel=8
pkgdesc="A library for high-performance 2D graphics"
url="https://www.levien.com/libart/"
arch="all"
options="!check" # No test suite.
license="LGPL-2.0-or-later"
subpackages="$pkgname-dev"
source="https://download.gnome.org/sources/libart-lgpl/2.3/libart-lgpl-$pkgver.tar.bz2"

builddir="$srcdir"/libart-lgpl-$pkgver

prepare() {
    update_config_sub

```

```
default_prepare
}
```

```
build() {
./configure \
--build=$CBUILD \
--host=$CHOST \
--prefix=/usr
make
}
```

```
package() {
make DESTDIR="$pkgdir" install
}
```

```
sha512sums="8a632a6a4da59e5e8c02ec2f5a57e36d182b325b46513765425e5f171ff9ae326af1b133725beba28f7e7
6654309e001aee9bace727b5b4c8589405256a3c020 libart_lgpl-2.3.21.tar.bz2"
mini_sendmail - accept email on behalf of real sendmail
```

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## 1.194 xz-libs 5.4.5-r0



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Todd C. Miller modified the MD5 code to do MD4 based on RFC 1186.

Files:

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src/md5.c

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include/bsd/sys/param.h  
include/bsd/unistd.h  
src/bsd\_getopt.c  
src/err.c  
src/fgetln.c  
src/progname.c

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include/bsd/netinet/ip\_icmp.h  
include/bsd/sys/bitstring.h  
include/bsd/sys/queue.h  
include/bsd/sys/time.h  
include/bsd/timeconv.h  
include/bsd/vis.h  
man/bitstring.3bsd  
man/errc.3bsd  
man/explicit\_bzero.3bsd  
man/fgetln.3bsd  
man/fgetwln.3bsd  
man/fpurge.3bsd  
man/funopen.3bsd  
man/getbsize.3bsd  
man/heapsort.3bsd  
man/nlist.3bsd  
man/pwcache.3bsd  
man/queue.3bsd  
man/radixsort.3bsd  
man/reallocarray.3bsd  
man/reallocf.3bsd  
man/setmode.3bsd  
man/strmode.3bsd

man/strnstr.3bsd  
man/strtoi.3bsd  
man/strtou.3bsd  
man/unvis.3bsd  
man/vis.3bsd  
man/wcsncpy.3bsd  
src/getbsize.c  
src/heapsort.c  
src/merge.c  
src/nlist.c  
src/pwcache.c  
src/radixsort.c  
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man/fmtcheck.3bsd

man/humanize\_number.3bsd

man/stringlist.3bsd

man/timeval.3bsd

src/fmtcheck.c

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man/tree.3bsd  
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man/strncpy.3bsd  
man/strtonum.3bsd  
src/arc4random.c  
src/arc4random\_linux.h  
src/arc4random\_uniform.c  
src/arc4random\_unix.h  
src/arc4random\_win.h  
src/closefrom.c  
src/freezero.c  
src/getentropy\_aix.c  
src/getentropy\_bsd.c  
src/getentropy\_hpux.c  
src/getentropy\_hurd.c  
src/getentropy\_linux.c  
src/getentropy\_osx.c  
src/getentropy\_solaris.c  
src/getentropy\_win.c  
src/readpassphrase.c  
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## 1.203 libncursesw 6.4\_p20231125-r0

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Files: install-sh

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Calling this script `install-sh` is preferred over `install.sh`, to prevent `make` implicit rules from creating a file called `install` from it when there is no `Makefile`.

This script is compatible with the BSD `install` script, but was written from scratch. It can only install one file at a time, a restriction shared with many OS's `install` programs.

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-- vile: txtmode file-encoding=utf-8

## 1.204 py3-pip-pyc 23.3.1-r0

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This package contains a modified version of `ca-bundle.crt`:

`ca-bundle.crt` -- Bundle of CA Root Certificates

Certificate data from Mozilla as of: Thu Nov 3 19:04:19 2011#

This is a bundle of X.509 certificates of public Certificate Authorities (CA). These were automatically extracted from Mozilla's root certificates file (certdata.txt). This file can be found in the mozilla source tree: <https://hg.mozilla.org/mozilla-central/file/tip/security/nss/lib/ckfw/builtins/certdata.txt> It contains the certificates in PEM format and therefore can be directly used with curl / libcurl / php\_curl, or with an Apache+mod\_ssl webserver for SSL client authentication. Just configure this file as the SSLCACertificateFile.#

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@(#) \$RCSfile: certdata.txt,v

\$ \$Revision: 1.80 \$ \$Date: 2011/11/03 15:11:58 \$

#### A. HISTORY OF THE SOFTWARE

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Python was created in the early 1990s by Guido van Rossum at Stichting Mathematisch Centrum (CWI, see <https://www.cwi.nl>) in the Netherlands as a successor of a language called ABC. Guido remains Python's principal author, although it includes many contributions from others.

In 1995, Guido continued his work on Python at the Corporation for National Research Initiatives (CNRI, see <https://www.cnri.reston.va.us>) in Reston, Virginia where he released several versions of the software.

In May 2000, Guido and the Python core development team moved to BeOpen.com to form the BeOpen PythonLabs team. In October of the same year, the PythonLabs team moved to Digital Creations, which became Zope Corporation. In 2001, the Python Software Foundation (PSF, see <https://www.python.org/psf/>) was formed, a non-profit organization created specifically to own Python-related Intellectual Property. Zope Corporation was a sponsoring member of the PSF.

All

Python releases are Open Source (see <https://opensource.org> for the Open Source Definition). Historically, most, but not all, Python releases have also been GPL-compatible; the table below summarizes the various releases.

Release	Derived from	Year	Owner	GPL-compatible? (1)
0.9.0 thru 1.2		1991-1995	CWI	yes

1.3 thru 1.5.2	1.2	1995-1999	CNRI	yes
1.6	1.5.2	2000	CNRI	no
2.0	1.6	2000	BeOpen.com	no
1.6.1	1.6	2001	CNRI	yes (2)
2.1	2.0+1.6.1	2001	PSF	no
2.0.1	2.0+1.6.1	2001	PSF	yes
2.1.1	2.1+2.0.1	2001	PSF	yes
2.1.2	2.1.1	2002	PSF	yes
2.1.3	2.1.2	2002	PSF	yes
2.2 and above	2.1.1	2001-now		
PSF	yes			

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(2) According to Richard Stallman, 1.6.1 is not GPL-compatible, because its license has a choice of law clause. According to CNRI, however, Stallman's lawyer has told CNRI's lawyer that 1.6.1 is "not incompatible" with the GPL.

Thanks to the many outside volunteers who have worked under Guido's direction to make these releases possible.

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#### A. HISTORY OF THE SOFTWARE

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Python was created in the early 1990s by Guido van Rossum at Stichting Mathematisch Centrum (CWI, see <http://www.cwi.nl>) in the Netherlands as a successor of a language called ABC. Guido remains Python's principal author, although it includes many contributions from others.

In 1995, Guido continued his work on Python at the Corporation for National Research Initiatives (CNRI, see <http://www.cnri.reston.va.us>)

in Reston, Virginia where he released several versions of the software.

In May 2000, Guido and the Python core development team moved to BeOpen.com to form the BeOpen PythonLabs team. In October of the same year, the PythonLabs team moved to Digital Creations (now Zope Corporation, see <http://www.zope.com>). In 2001, the Python Software Foundation (PSF, see <http://www.python.org/psf/>) was formed, a non-profit organization created specifically to own Python-related Intellectual Property. Zope Corporation is a sponsoring member of the PSF.

All Python releases are Open Source (see <http://www.opensource.org> for the Open Source Definition). Historically, most, but not all, Python releases have also been GPL-compatible; the table below summarizes the various releases.

Release	Derived from	Year	Owner	GPL-compatible? (1)
0.9.0 thru 1.2		1991-1995	CWI	yes
1.3 thru 1.5.2	1.2	1995-1999	CNRI	yes
1.6	1.5.2	2000	CNRI	no
2.0	1.6	2000	BeOpen.com	no
1.6.1	1.6	2001	CNRI	yes (2)
2.1	2.0+1.6.1	2001	PSF	no
2.0.1	2.0+1.6.1	2001	PSF	yes
2.1.1	2.1+2.0.1	2001	PSF	yes
2.2	2.1.1	2001	PSF	yes
2.1.2	2.1.1	2002	PSF	yes
2.1.3				
2.1.2	2002	PSF	yes	
2.2.1	2.2	2002	PSF	yes
2.2.2	2.2.1	2002	PSF	yes
2.2.3	2.2.2	2003	PSF	yes
2.3	2.2.2	2002-2003	PSF	yes
2.3.1	2.3	2002-2003	PSF	yes
2.3.2	2.3.1	2002-2003	PSF	yes
2.3.3	2.3.2	2002-2003	PSF	yes
2.3.4	2.3.3	2004	PSF	yes
2.3.5	2.3.4	2005	PSF	yes
2.4	2.3	2004	PSF	yes
2.4.1	2.4	2005	PSF	yes
2.4.2	2.4.1	2005	PSF	yes
2.4.3	2.4.2	2006	PSF	yes
2.4.4	2.4.3	2006	PSF	yes
2.5	2.4	2006	PSF	yes

2.5.1	2.5	2007	PSF	yes
2.5.2	2.5.1	2008	PSF	yes
2.5.3	2.5.2	2008	PSF	yes
2.6	2.5	2008	PSF	yes
2.6.1	2.6	2008	PSF	yes
2.6.2	2.6.1	2009	PSF	yes
2.6.3	2.6.2	2009	PSF	yes
2.6.4	2.6.3	2009	PSF	yes
2.6.5	2.6.4	2010	PSF	yes
3.0	2.6	2008	PSF	yes
3.0.1	3.0	2009	PSF	yes
3.1	3.0.1	2009	PSF	yes
3.1.1	3.1	2009	PSF	yes
3.1.2	3.1	2010	PSF	yes
3.2	3.1	2010	PSF	yes

Footnotes:

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(2) According to Richard Stallman, 1.6.1 is not GPL-compatible, because its license has a choice of law clause. According to CNRI, however, Stallman's lawyer has told CNRI's lawyer that 1.6.1 is "not incompatible" with the GPL.

Thanks to the many outside volunteers who have worked under Guido's direction to make these releases possible.

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# 1.205 libpanelw 6.4\_p20231125-r0

## 1.205.1 Available under license :

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```
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```

```

@ base
# Library objects
panel lib $(srcdir) $(HEADER_DEPS)
p_above lib $(srcdir) $(HEADER_DEPS)
p_below lib $(srcdir) $(HEADER_DEPS)
p_bottom lib $(srcdir) $(HEADER_DEPS)
p_delete lib $(srcdir) $(HEADER_DEPS)
p_hide lib $(srcdir) $(HEADER_DEPS)
p_hidden lib $(srcdir) $(HEADER_DEPS)
p_move lib $(srcdir) $(HEADER_DEPS)
p_new lib $(srcdir) $(HEADER_DEPS)
p_replace lib $(srcdir) $(HEADER_DEPS)
p_show lib $(srcdir) $(HEADER_DEPS)
p_top lib $(srcdir) $(HEADER_DEPS)
p_update lib $(srcdir) $(HEADER_DEPS)
p_user lib $(srcdir) $(HEADER_DEPS)
p_win lib $(srcdir) $(HEADER_DEPS)

```

```

# vile:makemode

```

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\*\*\*\*\*/

/\* LINTLIBRARY \*/

/\* ./panel.c \*/

```
#include <panel.priv.h>
```

```
#undef _nc_retrace_panel  
PANEL *_nc_retrace_panel(  
    PANEL *pan)  
    { return(*(PANEL **)0); }
```

```
#undef _nc_my_visbuf  
const char *_nc_my_visbuf(  
    const void *ptr,  
    int n)  
    { return(*(const char **)0); }
```

```
#undef _nc_dPanel  
void _nc_dPanel(  
    const char *text,  
    const PANEL *pan)  
    { /* void */ }
```

```
#undef _nc_dStack  
void _nc_dStack(  
    const char *fmt,  
    int num,  
    const PANEL *pan)  
    { /* void */ }
```

```
#undef _nc_Wnoutrefresh  
void _nc_Wnoutrefresh(  
    const
```

```

PANEL *pan)
{ /* void */ }

#undef _nc_Touchpan
void _nc_Touchpan(
    const PANEL *pan)
{ /* void */ }

#undef _nc_Touchline
void _nc_Touchline(
    const PANEL *pan,
    int start,
    int count)
{ /* void */ }

/* ./p_above.c */

#undef ground_panel
PANEL *ground_panel(
    SCREEN *sp)
{ return(*(PANEL **)0); }

#undef panel_above
PANEL *panel_above(
    const PANEL *pan)
{ return(*(PANEL **)0); }

/* ./p_below.c */

#undef ceiling_panel
PANEL *ceiling_panel(
    SCREEN *sp)
{ return(*(PANEL **)0); }

#undef panel_below
PANEL *panel_below(
    const PANEL *pan)
{ return(*(PANEL **)0); }

/* ./p_bottom.c */

#undef bottom_panel
int bottom_panel(
    PANEL *pan)
{ return(*(int *)0); }

/* ./p_delete.c */

```



```

#undef del_panel
int del_panel(
    PANEL *pan)
    { return(*(int *)0); }

/* ./p_hide.c */

#undef hide_panel
int hide_panel(
    PANEL *pan)
    { return(*(int *)0); }

/* ./p_hidden.c */

#undef panel_hidden
int panel_hidden(
    const PANEL *pan)
    { return(*(int *)0); }

/* ./p_move.c
*/

#undef move_panel
int move_panel(
    PANEL *pan,
    int starty,
    int startx)
    { return(*(int *)0); }

/* ./p_new.c */

#undef new_panel
PANEL *new_panel(
    WINDOW *win)
    { return(*(PANEL **)0); }

/* ./p_replace.c */

#undef replace_panel
int replace_panel(
    PANEL *pan,
    WINDOW *win)
    { return(*(int *)0); }

/* ./p_show.c */

#undef show_panel
int show_panel(

```

```

PANEL *pan)
{ return(*(int *)0); }

/* ./p_top.c */

#undef top_panel
int top_panel(
    PANEL *pan)
{ return(*(int *)0); }

/* ./p_update.c */

#undef update_panels_sp
void update_panels_sp(
    SCREEN *sp)
{ /* void */ }

#undef update_panels
void update_panels(void)
{ /* void */ }

/* ./p_user.c */

#undef set_panel_userptr
int set_panel_userptr(
    PANEL *pan,
    const void *uptr)
{ return(*(int *)0); }

#undef panel_userptr
const void *panel_userptr(
    const PANEL *pan)
{ return(*(const void **)0); }

/* ./p_win.c */

#undef panel_window
WINDOW *panel_window(
    const PANEL *pan)
{ return(*(WINDOW **)0);
}

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/* LINTLIBRARY */

/* ./panel.c */

#include <panel.priv.h>

#undef _nc_retrace_panel
PANEL *_nc_retrace_panel(
    PANEL *pan)
{ return(*(PANEL **)0); }

#undef _nc_my_visbuf
const char *_nc_my_visbuf(
    const void *ptr,
    int n)
{ return(*(const char **)0); }

```

```

#undef _nc_dPanel
void _nc_dPanel(
    const char *text,
    const PANEL *pan)
    { /* void */ }

#undef _nc_dStack
void _nc_dStack(
    const char *fmt,
    int num,
    const PANEL *pan)
    { /* void */ }

#undef _nc_Wnoutrefresh
void _nc_Wnoutrefresh(
    const
    PANEL *pan)
    { /* void */ }

#undef _nc_Touchpan
void _nc_Touchpan(
    const PANEL *pan)
    { /* void */ }

#undef _nc_Touchline
void _nc_Touchline(
    const PANEL *pan,
    int start,
    int count)
    { /* void */ }

/* ./p_above.c */

#undef ground_panel
PANEL *ground_panel(
    SCREEN *sp)
    { return(*(PANEL **)0); }

#undef panel_above
PANEL *panel_above(
    const PANEL *pan)
    { return(*(PANEL **)0); }

/* ./p_below.c */

#undef ceiling_panel
PANEL *ceiling_panel(

```

```

SCREEN *sp)
{ return(*(PANEL **)0); }

#undef panel_below
PANEL *panel_below(
    const PANEL *pan)
{ return(*(PANEL **)0); }

/* ./p_bottom.c */

#undef bottom_panel
int bottom_panel(
    PANEL *pan)
{ return(*(int *)0); }

/* ./p_delete.c */

#undef del_panel
int del_panel(
    PANEL *pan)
{ return(*(int *)0); }

/* ./p_hide.c */

#undef hide_panel
int hide_panel(
    PANEL *pan)
{ return(*(int *)0); }

/* ./p_hidden.c */

#undef panel_hidden
int panel_hidden(
    const PANEL *pan)
{ return(*(int *)0); }

/* ./p_move.c
*/

#undef move_panel
int move_panel(
    PANEL *pan,
    int starty,
    int startx)
{ return(*(int *)0); }

/* ./p_new.c */

```

```
#undef new_panel
PANEL *new_panel(
    WINDOW *win)
{ return(*(PANEL **)0); }
```

```
/* ./p_replace.c */
```

```
#undef replace_panel
int replace_panel(
    PANEL *pan,
    WINDOW *win)
{ return(*(int *)0); }
```

```
/* ./p_show.c */
```

```
#undef show_panel
int show_panel(
    PANEL *pan)
{ return(*(int *)0); }
```

```
/* ./p_top.c */
```

```
#undef top_panel
int top_panel(
    PANEL *pan)
{ return(*(int *)0); }
```

```
/* ./p_update.c */
```

```
#undef update_panels_sp
void update_panels_sp(
    SCREEN *sp)
{ /* void */ }
```

```
#undef update_panels
void update_panels(void)
{ /* void */ }
```

```
/* ./p_user.c */
```

```
#undef set_panel_userptr
int set_panel_userptr(
    PANEL *pan,
    const void *uptr)
{ return(*(int *)0); }
```

```
#undef panel_userptr
const void *panel_userptr(
```

```
const PANEL *pan)
{ return(*(const void **)0); }
```

```
/* ./p_win.c */
```

```
#undef panel_window
WINDOW *panel_window(
const PANEL *pan)
{ return(*(WINDOW **)0);
}
```

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```
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\* /opt/cola/permits/1864355811\_1705961080.3554633/0/libpanel-6-4-zip/libpanel\_6.4/p\_user.c

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/* LINTLIBRARY */

/* ./panel.c */

#include <panel.priv.h>

#undef _nc_retrace_panel
PANEL *_nc_retrace_panel(
    PANEL *pan)
{ return(*(PANEL **)0); }

#undef _nc_my_visbuf
const char *_nc_my_visbuf(
    const void *ptr,
    int n)
{ return(*(const char **)0); }

#undef _nc_dPanel
void _nc_dPanel(
    const char *text,
    const PANEL *pan)
{ /* void */ }

#undef _nc_dStack
void _nc_dStack(
    const char *fmt,
    int num,
    const PANEL *pan)
{ /* void */ }

#undef _nc_Wnoutrefresh
void _nc_Wnoutrefresh(
    const
    PANEL *pan)
{ /* void */ }

```

```

#undef _nc_Touchpan
void _nc_Touchpan(
    const PANEL *pan)
    { /* void */ }

#undef _nc_Touchline
void _nc_Touchline(
    const PANEL *pan,
    int start,
    int count)
    { /* void */ }

/* ./p_above.c */

#undef ground_panel
PANEL *ground_panel(
    SCREEN *sp)
    { return(*(PANEL **)0); }

#undef panel_above
PANEL *panel_above(
    const PANEL *pan)
    { return(*(PANEL **)0); }

/* ./p_below.c */

#undef ceiling_panel
PANEL *ceiling_panel(
    SCREEN *sp)
    { return(*(PANEL **)0); }

#undef panel_below
PANEL *panel_below(
    const PANEL *pan)
    { return(*(PANEL **)0); }

/* ./p_bottom.c */

#undef bottom_panel
int bottom_panel(
    PANEL *pan)
    { return(*(int *)0); }

/* ./p_delete.c */

#undef del_panel
int del_panel(
    PANEL *pan)

```

```

    { return(*(int *)0); }

/* ./p_hide.c */

#undef hide_panel
int hide_panel(
    PANEL *pan)
    { return(*(int *)0); }

/* ./p_hidden.c */

#undef panel_hidden
int panel_hidden(
    const PANEL *pan)
    { return(*(int *)0); }

/* ./p_move.c
 */

#undef move_panel
int move_panel(
    PANEL *pan,
    int starty,
    int startx)
    { return(*(int *)0); }

/* ./p_new.c */

#undef new_panel
PANEL *new_panel(
    WINDOW *win)
    { return(*(PANEL **)0); }

/* ./p_replace.c */

#undef replace_panel
int replace_panel(
    PANEL *pan,
    WINDOW *win)
    { return(*(int *)0); }

/* ./p_show.c */

#undef show_panel
int show_panel(
    PANEL *pan)
    { return(*(int *)0); }

```

```
/* ./p_top.c */
```

```
#undef top_panel  
int top_panel(  
    PANEL *pan)  
    { return(*(int *)0); }
```

```
/* ./p_update.c */
```

```
#undef update_panels_sp  
void update_panels_sp(  
    SCREEN *sp)  
    { /* void */ }
```

```
#undef update_panels  
void update_panels(void)  
    { /* void */ }
```

```
/* ./p_user.c */
```

```
#undef set_panel_userptr  
int set_panel_userptr(  
    PANEL *pan,  
    const void *uptr)  
    { return(*(int *)0); }
```

```
#undef panel_userptr  
const void *panel_userptr(  
    const PANEL *pan)  
    { return(*(const void **)0); }
```

```
/* ./p_win.c */
```

```
#undef panel_window  
WINDOW *panel_window(  
    const PANEL *pan)  
    { return(*(WINDOW **)0);  
    }
```

Found in path(s):

\* /opt/cola/permits/1864355811\_1705961080.3554633/0/libpanel-6-4-zip/libpanel\_6.4/liblpanelw

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- \* /opt/cola/permits/1864355811\_1705961080.3554633/0/libpanel-6-4-zip/libpanel\_6.4/p\_delete.c
- \* /opt/cola/permits/1864355811\_1705961080.3554633/0/libpanel-6-4-zip/libpanel\_6.4/p\_update.c
- \* /opt/cola/permits/1864355811\_1705961080.3554633/0/libpanel-6-4-zip/libpanel\_6.4/p\_hide.c
- \* /opt/cola/permits/1864355811\_1705961080.3554633/0/libpanel-6-4-zip/libpanel\_6.4/p\_hidden.c

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#
# Author: Thomas E. Dickey <dickey@clark.net> 1996
#
$(srcdir)/panel.h
# vile:makemode

```

Found in path(s):

- \* /opt/cola/permits/1864355811\_1705961080.3554633/0/libpanel-6-4-zip/libpanel\_6.4/headers



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```
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*/opt/cola/permits/1864355811_1705961080.3554633/0/libpanel-6-4-zip/libpanel_6.4/p_win.c
```

## 1.206 distlib 0.3.8

### 1.206.1 Available under license :

#### A. HISTORY OF THE SOFTWARE

=====

Python was created in the early 1990s by Guido van Rossum at Stichting Mathematisch Centrum (CWI, see <http://www.cwi.nl>) in the Netherlands as a successor of a language called ABC. Guido remains Python's principal author, although it includes many contributions from others.

In 1995, Guido continued his work on Python at the Corporation for National Research Initiatives (CNRI, see <http://www.cnri.reston.va.us>) in Reston, Virginia where he released several versions of the software.

In May 2000, Guido and the Python core development team moved to BeOpen.com to form the BeOpen PythonLabs team. In October of the same year, the PythonLabs team moved to Digital Creations (now Zope Corporation, see <http://www.zope.com>). In 2001, the Python Software Foundation (PSF, see <http://www.python.org/psf/>) was formed, a non-profit organization created specifically to own Python-related Intellectual Property. Zope Corporation is a sponsoring member of the PSF.

All Python releases are Open Source (see <http://www.opensource.org> for the Open Source Definition). Historically, most, but not all, Python releases have also been GPL-compatible; the table below summarizes the various releases.

Release	Derived from	Year	Owner	GPL-compatible? (1)
0.9.0 thru 1.2		1991-1995	CWI	yes
1.3 thru 1.5.2	1.2	1995-1999	CNRI	yes
1.6	1.5.2	2000	CNRI	no
2.0	1.6	2000	BeOpen.com	no
1.6.1	1.6	2001	CNRI	yes (2)
2.1	2.0+1.6.1	2001	PSF	no
2.0.1	2.0+1.6.1	2001	PSF	yes
2.1.1	2.1+2.0.1	2001	PSF	yes
2.2	2.1.1	2001	PSF	yes
2.1.2	2.1.1	2002	PSF	yes
2.1.3				
2.1.2	2002	PSF	yes	
2.2.1	2.2	2002	PSF	yes
2.2.2	2.2.1	2002	PSF	yes
2.2.3	2.2.2	2003	PSF	yes
2.3	2.2.2	2002-2003	PSF	yes
2.3.1	2.3	2002-2003	PSF	yes
2.3.2	2.3.1	2002-2003	PSF	yes
2.3.3	2.3.2	2002-2003	PSF	yes
2.3.4	2.3.3	2004	PSF	yes
2.3.5	2.3.4	2005	PSF	yes
2.4	2.3	2004	PSF	yes
2.4.1	2.4	2005	PSF	yes
2.4.2	2.4.1	2005	PSF	yes

2.4.3	2.4.2	2006	PSF	yes
2.4.4	2.4.3	2006	PSF	yes
2.5	2.4	2006	PSF	yes
2.5.1	2.5	2007	PSF	yes
2.5.2	2.5.1	2008	PSF	yes
2.5.3	2.5.2	2008	PSF	yes
2.6	2.5	2008	PSF	yes
2.6.1	2.6	2008	PSF	yes
2.6.2	2.6.1	2009	PSF	yes
2.6.3	2.6.2	2009	PSF	yes
2.6.4	2.6.3	2009	PSF	yes
2.6.5	2.6.4	2010	PSF	yes
3.0	2.6	2008	PSF	yes
3.0.1	3.0	2009	PSF	yes
3.1	3.0.1	2009	PSF	yes
3.1.1	3.1	2009	PSF	yes
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The Distutils2 project was started by Tarek Ziad and is currently maintained by ric Araujo. Many people have contributed to the project.

distlib has started off using some of the code from distutil2.

If you're making a patch, please add your name below in alphabetical order, and welcome into the Fellowship of the Packaging!

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## 1.212 gcompat 1.1.0-r4

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## 1.217 py3-pip 23.3.1-r0

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This package contains a modified version of ca-bundle.crt:

ca-bundle.crt -- Bundle of CA Root Certificates

Certificate data from Mozilla as of: Thu Nov 3 19:04:19 2011#

This is a bundle of X.509 certificates of public Certificate Authorities (CA). These were automatically extracted from Mozilla's root certificates file (certdata.txt). This file can be found in the mozilla source tree:

<https://hg.mozilla.org/mozilla-central/file/tip/security/nss/lib/ckfw/builtins/certdata.txt>

It contains the certificates in PEM format and therefore can be directly used with curl / libcurl / php\_curl, or with an Apache+mod\_ssl webserver for SSL client authentication.

Just configure this file as the SSLCACertificateFile.#

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@(#) \$RCSfile: certdata.txt,v

\$ \$Revision: 1.80 \$ \$Date: 2011/11/03 15:11:58 \$

A. HISTORY OF THE SOFTWARE

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Python was created in the early 1990s by Guido van Rossum at Stichting Mathematisch Centrum (CWI, see <https://www.cwi.nl>) in the Netherlands as a successor of a language called ABC. Guido remains Python's principal author, although it includes many contributions from others.

In 1995, Guido continued his work on Python at the Corporation for National Research Initiatives (CNRI, see <https://www.cnri.reston.va.us>) in Reston, Virginia where he released several versions of the software.

In May 2000, Guido and the Python core development team moved to

BeOpen.com to form the BeOpen PythonLabs team. In October of the same year, the PythonLabs team moved to Digital Creations, which became Zope Corporation. In 2001, the Python Software Foundation (PSF, see <https://www.python.org/psf/>) was formed, a non-profit organization created specifically to own Python-related Intellectual Property. Zope Corporation was a sponsoring member of the PSF.

All

Python releases are Open Source (see <https://opensource.org> for the Open Source Definition). Historically, most, but not all, Python releases have also been GPL-compatible; the table below summarizes the various releases.

Release	Derived from	Year	Owner	GPL-compatible? (1)
0.9.0 thru 1.2		1991-1995	CWI	yes
1.3 thru 1.5.2	1.2	1995-1999	CNRI	yes
1.6	1.5.2	2000	CNRI	no
2.0	1.6	2000	BeOpen.com	no
1.6.1	1.6	2001	CNRI	yes (2)
2.1	2.0+1.6.1	2001	PSF	no
2.0.1	2.0+1.6.1	2001	PSF	yes
2.1.1	2.1+2.0.1	2001	PSF	yes
2.1.2	2.1.1	2002	PSF	yes
2.1.3	2.1.2	2002	PSF	yes
2.2 and above	2.1.1	2001-now		
PSF	yes			

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(2) According to Richard Stallman, 1.6.1 is not GPL-compatible, because its license has a choice of law clause. According to CNRI, however, Stallman's lawyer has told CNRI's lawyer that 1.6.1 is "not incompatible" with the GPL.

Thanks to the many outside volunteers who have worked under Guido's direction to make these releases possible.

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#### A. HISTORY OF THE SOFTWARE

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Python was created in the early 1990s by Guido van Rossum at Stichting Mathematisch Centrum (CWI, see <http://www.cwi.nl>) in the Netherlands as a successor of a language called ABC. Guido remains Python's principal author, although it includes many contributions from others.

In 1995, Guido continued his work on Python at the Corporation for National Research Initiatives (CNRI, see <http://www.cnri.reston.va.us>) in Reston, Virginia where he released several versions of the software.

In May 2000, Guido and the Python core development team moved to BeOpen.com to form the BeOpen PythonLabs team. In October of the same year, the PythonLabs team moved to Digital Creations (now Zope Corporation, see <http://www.zope.com>). In 2001, the Python Software Foundation (PSF, see <http://www.python.org/psf/>) was formed, a non-profit organization created specifically to own Python-related Intellectual Property. Zope Corporation is a sponsoring member of the PSF.

All Python releases are Open Source (see <http://www.opensource.org> for the Open Source Definition). Historically, most, but not all, Python releases have also been GPL-compatible; the table below summarizes the various releases.

Release	Derived from	Year	Owner	GPL-compatible? (1)
0.9.0 thru 1.2		1991-1995	CWI	yes
1.3 thru 1.5.2	1.2	1995-1999	CNRI	yes
1.6	1.5.2	2000	CNRI	no
2.0	1.6	2000	BeOpen.com	no
1.6.1	1.6	2001	CNRI	yes (2)
2.1	2.0+1.6.1	2001	PSF	no
2.0.1	2.0+1.6.1	2001	PSF	yes



2.1.1	2.1+2.0.1	2001	PSF	yes
2.2	2.1.1	2001	PSF	yes
2.1.2	2.1.1	2002	PSF	yes
2.1.3				
2.1.2	2002	PSF	yes	
2.2.1	2.2	2002	PSF	yes
2.2.2	2.2.1	2002	PSF	yes
2.2.3	2.2.2	2003	PSF	yes
2.3	2.2.2	2002-2003	PSF	yes
2.3.1	2.3	2002-2003	PSF	yes
2.3.2	2.3.1	2002-2003	PSF	yes
2.3.3	2.3.2	2002-2003	PSF	yes
2.3.4	2.3.3	2004	PSF	yes
2.3.5	2.3.4	2005	PSF	yes
2.4	2.3	2004	PSF	yes
2.4.1	2.4	2005	PSF	yes
2.4.2	2.4.1	2005	PSF	yes
2.4.3	2.4.2	2006	PSF	yes
2.4.4	2.4.3	2006	PSF	yes
2.5	2.4	2006	PSF	yes
2.5.1	2.5	2007	PSF	yes
2.5.2	2.5.1	2008	PSF	yes
2.5.3	2.5.2	2008	PSF	yes
2.6	2.5	2008	PSF	yes
2.6.1	2.6	2008	PSF	yes
2.6.2	2.6.1	2009	PSF	yes
2.6.3	2.6.2	2009	PSF	yes
2.6.4	2.6.3	2009	PSF	yes
2.6.5	2.6.4	2010	PSF	yes
3.0	2.6	2008	PSF	yes
3.0.1	3.0	2009	PSF	yes
3.1	3.0.1	2009	PSF	yes
3.1.1	3.1	2009	PSF	yes
3.1.2	3.1	2010	PSF	yes
3.2	3.1	2010	PSF	yes

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```
/* zlib.h -- interface of the 'zlib' general purpose compression library
   version 1.2.5, April 19th, 2010
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\*/

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# 1.228 coreutils 9.4-r2

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```
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```

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## 1.229 markupsafe 2.1.5

### 1.229.1 Available under license :

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Found in path(s):

\* /opt/cola/permits/1900590923\_1706908812.3420146/0/sailfishos-mirror-markupsafe-2-1-5-0-gfbba4ac-tar-gz/sailfishos-mirror-markupsafe-0e6f6a4/setup.cfg

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# 1.230 python-pip 24.0

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### A. HISTORY OF THE SOFTWARE

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Python was created in the early 1990s by Guido van Rossum at Stichting Mathematisch Centrum (CWI, see <http://www.cwi.nl>) in the Netherlands as a successor of a language called ABC. Guido remains Python's principal author, although it includes many contributions from others.

In 1995, Guido continued his work on Python at the Corporation for National Research Initiatives (CNRI, see <http://www.cnri.reston.va.us>) in Reston, Virginia where he released several versions of the software.

In May 2000, Guido and the Python core development team moved to BeOpen.com to form the BeOpen PythonLabs team. In October of the same year, the PythonLabs team moved to Digital Creations (now Zope Corporation, see <http://www.zope.com>). In 2001, the Python Software Foundation (PSF, see <http://www.python.org/psf/>) was formed, a non-profit organization created specifically to own Python-related Intellectual Property. Zope Corporation is a sponsoring member of the PSF.

All Python releases are Open Source (see <http://www.opensource.org> for the Open Source Definition). Historically, most, but not all, Python releases have also been GPL-compatible; the table below summarizes the various releases.

Release	Derived from	Year	Owner	GPL-compatible? (1)
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0.9.0 thru 1.2		1991-1995	CWI	yes
1.3 thru 1.5.2	1.2	1995-1999	CNRI	yes
1.6	1.5.2	2000	CNRI	no
2.0	1.6	2000	BeOpen.com	no
1.6.1	1.6	2001	CNRI	yes (2)
2.1	2.0+1.6.1	2001	PSF	no
2.0.1	2.0+1.6.1	2001	PSF	yes
2.1.1	2.1+2.0.1	2001	PSF	yes
2.2	2.1.1	2001	PSF	yes
2.1.2	2.1.1	2002	PSF	yes
2.1.3				
2.1.2	2002	PSF	yes	
2.2.1	2.2	2002	PSF	yes
2.2.2	2.2.1	2002	PSF	yes
2.2.3	2.2.2	2003	PSF	yes
2.3	2.2.2	2002-2003	PSF	yes
2.3.1	2.3	2002-2003	PSF	yes
2.3.2	2.3.1	2002-2003	PSF	yes
2.3.3	2.3.2	2002-2003	PSF	yes
2.3.4	2.3.3	2004	PSF	yes
2.3.5	2.3.4	2005	PSF	yes
2.4	2.3	2004	PSF	yes
2.4.1	2.4	2005	PSF	yes
2.4.2	2.4.1	2005	PSF	yes
2.4.3	2.4.2	2006	PSF	yes
2.4.4	2.4.3	2006	PSF	yes
2.5	2.4	2006	PSF	yes
2.5.1	2.5	2007	PSF	yes
2.5.2	2.5.1	2008	PSF	yes
2.5.3	2.5.2	2008	PSF	yes
2.6	2.5	2008	PSF	yes
2.6.1	2.6	2008	PSF	yes
2.6.2	2.6.1	2009	PSF	yes
2.6.3	2.6.2	2009	PSF	yes
2.6.4	2.6.3	2009	PSF	yes
2.6.5	2.6.4	2010	PSF	yes
3.0	2.6	2008	PSF	yes
3.0.1	3.0	2009	PSF	yes
3.1	3.0.1	2009	PSF	yes
3.1.1	3.1	2009	PSF	yes
3.1.2	3.1	2010	PSF	yes
3.2	3.1	2010	PSF	yes

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file (certdata.txt). This file can be found in the mozilla source tree:

<https://hg.mozilla.org/mozilla-central/file/tip/security/nss/lib/ckfw/builtins/certdata.txt>

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## 1.232 pierrec-lz4 4.1.21

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## 1.233 alpine-baselayout-data 3.4.3-r2

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```
# Automatically generated by apkbuild-cpan, template 3
# Contributor: Valery Kartel <valery.kartel@gmail.com>
# Maintainer: Celeste <cielesti@protonmail.com>
pkgname=perl-bsd-resource
#_pkgreal is used by apkbuild-cpan to find modules at MetaCpan
_pkgreal=BSD-Resource
pkgver=1.2911
pkgrel=9
pkgdesc="Perl extension implements the BSD process resource limit functions"
url="https://metacpan.org/release/BSD-Resource/"
arch="all"
license="Artistic-2.0 OR LGPL-2.0"
depends="perl"
makedepends="perl-dev"
subpackages="$pkgname-doc"
source="https://cpan.metacpan.org/authors/id/J/JH/JHI/BSD-Resource-$pkgver.tar.gz"
builddir="$srcdir/${_pkgreal}-${pkgver}"

build() {
    export CFLAGS=$(perl -MConfig -E 'say $Config{ccflags}')
    PERL_MM_USE_DEFAULT=1 perl -I. Makefile.PL INSTALLDIRS=vendor
```

```

make
}

check() {
export CFLAGS=$(perl -MConfig -E 'say $Config{ccflags}')
make test
}

package() {
make DESTDIR="$pkgdir" install
find "$pkgdir" \( -name perllocal.pod -o -name .packlist \) -delete
}

sha512sums="
d0032d41c7c0468ed1c6d8f57b885f6cb97a5039d754c8cb60b2067daedaf53bd15fb6561a3d0f828df16dfa5417f663b
8065ba65f4fea16dc9262728b3b6b85
  BSD-Resource-1.2911.tar.gz
"
# Contributor: Dhruvin Gandhi <contact@dhruvin.dev>
# Maintainer: Patrycja Rosa <alpine@ptrcnll.me>
pkgname=py3-license-expression
_pkgname=license-expression
pkgver=30.2.0
pkgrel=0
pkgdesc="Library to parse, compare, simplify and normalize license expressions"
url="https://github.com/nexB/license-expression"
arch="noarch"
license="Apache-2.0"
depends="python3 py3-boolean.py"
makedepends="py3-setuptools py3-setuptools_scm py3-gpep517 py3-wheel"
checkdepends="py3-pytest py3-pytest-xdist"
subpackages="$pkgname-pyc"
source="https://files.pythonhosted.org/packages/source/l/${_pkgname}/${_pkgname}-${pkgver}.tar.gz"
builddir="$srcdir/${_pkgname}-${pkgver}"

build() {
gpep517 build-wheel \
--wheel-dir .dist \
--output-fd 3 3>&1 >&2
}

check() {
python3 -m venv --clear --without-pip --system-site-packages .testenv
.testenv/bin/python3 -m installer .dist/*.whl
.testenv/bin/python3 -m pytest
}

package() {

```

```
python3 -m installer -d "$pkgdir" \  
.dist/*.whl  
}
```

sha512sums="

```
7be7ebab1d980063ab846a228c5247570d0e23ed52f4362ef7d88eb7a59274e6f74653b4e9cff8225597693087d750c5  
bf7fcf604440d8d3d2976ebcd7442c24
```

```
license-expression-30.2.0.tar.gz
```

"

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The Kohonen neural network code for color optimization was written by Anthony Dekker.

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The X-Spline code was written Carole Blanc (blanc@labri.u-bordeaux.fr) and Christophe Schlick (schlick@labri.u-bordeaux.fr) starting from an initial implementation done by C. Feuille, S. Grosbois, L. Maziere and L. Minihot as a student practice (Universite Bordeaux, France). For additional information about X-splines, see:

"X-Splines: A Spline Model Designed for the End User" by C. Blanc and C. Schlick, Proceedings of SIGGRAPH'95

<http://dept-info.labri.u-bordeaux.fr/~schlick/DOC/sig1.html>

# Maintainer: Jakub Panek <me@panekj.dev>

```
pkgname=cargo-license
```

```
pkgver=0.5.1
```

```
pkgrel=4
```

```
pkgdesc="Cargo subcommand to see license of dependencies"
```

```
url="https://github.com/onur/cargo-license"
```

```
arch="all !s390x !riscv64" # rust
```

```
license="MIT"
```

```
makedepends="cargo cargo-auditable"
```

```
source="$pkgname-$pkgver.tar.gz::https://crates.io/api/v1/crates/cargo-license/$pkgver/download"
```

```

prepare() {
    default_prepare

    cargo fetch --target="$CTARGET" --locked
}

build() {
    cargo auditable build --release --frozen
}

check() {
    cargo test --frozen
}

package() {
    install -Dm755 target/release/cargo-license -t "$pkgdir"/usr/bin
}

sha512sums="
4d8d430df91c6aac53d2305d3125eae492324e85c4db29d33d452b3848f33a55088e71247c6c72c6a62f4e924a374a
115bf14b4f398e7950b9eb52415f2244 cargo-license-0.5.1.tar.gz
"

# Contributor: Maxim Karasev <begs@disroot.org>
# Maintainer: mio <miyopan@e.email>
pkgname=bsd-games
pkgver=3.3
pkgrel=1
pkgdesc="traditional text mode games from BSD"
url="https://bsd-games.sourceforge.io/"
arch="all"
license="BSD-3-Clause"
install="$pkgname.post-install"
makedepends="ncurses-dev coreutils" # configure causes busybox expr error
subpackages="$pkgname-doc"
source="https://sourceforge.net/projects/bsd-games/files/bsd-games-$pkgver.tar.gz"
options="!check" # no tests

build() {
    # some GNU autoconf options are ignored, but it works
    ./configure \
        --build=$CBUILD \
        --host=$CHOST \
        --prefix=/usr \
        --sysconfdir=/etc \
        --mandir=/usr/share/man \
        --localstatedir=/var/lib # it really shouldn't be in /var

```

```

make
}

package() {
make DESTDIR="$pkgdir" install
install -Dm644 LICENSE "$pkgdir"/usr/share/licenses/bsd-games/LICENSE
}

sha512sums="
aaf36d09d4fe68514a5c279063d7e77a9a9a84c447037cba974b29faa07eb80c2aab2379d0699c196b5c27ffe1b2bb2c6
8d3390143e0e62d5e3d210ccfb61294
  bsd-games-3.3.tar.gz
"

# Contributor: Carlo Landmeter <clandmeter@alpinelinux.org>
# Maintainer: Kevin Daudt <kdaudt@alpinelinux.org>
pkgname=spdx-licenses
pkgver=3.22
pkgrel=0
pkgdesc="Various data formats for the SPDX License List"
url="https://spdx.org/"
arch="noarch"
options="!check" # no test suite
license="CC-BY-3.0"
source="license-list-data-$pkgver.tar.gz::https://github.com/spdx/license-list-data/archive/v$pkgver.tar.gz"
builddir="$srcdir/license-list-data-$pkgver"
subpackages="$pkgname-list"

_types="html json rdfa rdfnt rdfturtle rdfxml template text"

for type in $_types; do
subpackages="$subpackages $pkgname-$type:_subpkg"
done

package() {
mkdir -p "$pkgdir"
}

_subpkg() {
local type=${subpkgname/$pkgname-/}
pkgdesc="$pkgdesc ($type)"
install_if="$pkgname"
mkdir -p "$subpkgdir"/usr/share/spdx
cp -r "$builddir"/$type "$subpkgdir"/usr/share/spdx/
}

list() {
pkgdesc="$pkgdesc (licence list)"
mkdir -p "$subpkgdir"/usr/share/spdx

```

```
local i; for i in "$builddir"/text/*.txt; do
  local license=${i##*/}
  echo
  ${license%.*} >> "$subpkgdir"/usr/share/spdx/license.lst
done
}
```

```
sha512sums="
b213fe66699770d75a4c994a01a5c08325751423516c2fb871088a47e7e7ce605736064f5ce3a63dc1d3c462271832db
7bc464ac968df1888f9823787964c786 license-list-data-3.22.tar.gz
"
```

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<http://members.nbc.com/silicon39/>  
<http://www.mp3.com/silicon39>  
<https://analoguesque.x10host.com/>  
# Contributor: Fabian Affolter <fabian@affolter-engineering.ch>  
# Maintainer: Fabian Affolter <fabian@affolter-engineering.ch>  
pkgname=py3-flake8-copyright  
\_pkgname=flake8-copyright  
pkgver=0.2.4  
pkgrel=1  
pkgdesc="Extension for flake8 which checks for copyrights"  
options="!check" # No testsuite  
url="https://github.com/savoirfairelinux/flake8-copyright"  
arch="noarch"  
license="MIT"  
depends="py3-flake8 py3-setuptools"  
subpackages="\$pkgname-pyc"  
source="https://files.pythonhosted.org/packages/source/\${\_pkgname:0:1}/\${\_pkgname}/\${\_pkgname}-\${pkgver}.tar.gz"  
builddir="\$srcdir"/\${\_pkgname}-\${pkgver}

replaces="py-flake8-copyright" # Backwards compatibility  
provides="py-flake8-copyright=\${pkgver}-r\${pkgrel}" # Backwards compatibility

```
build() {  
    python3 setup.py build  
}
```

```
package() {  
    python3 setup.py install --skip-build --root="$pkgdir"  
}
```

```
sha512sums="  
a6ab47e1bb715618f075c51f398e18180404871b3b0faf1c2d30701d5203db6bc23771bf22ffb5bafcd8ee856b9b64237  
b316bd503ae7dceed6ca284ccd5a74d flake8-copyright-0.2.4.tar.gz  
"
```

mini\_sendmail - accept email on behalf of real sendmail

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```
# Maintainer: Natanael Copa <ncopa@alpinelinux.org>
```

```
pkgname=libart-lgpl
```

```
pkgver=2.3.21
```

```
pkgrel=8
```

```
pkgdesc="A library for high-performance 2D graphics"
```

```
url="https://www.levien.com/libart/"
```

```
arch="all"
```

```
options="!check" # No test suite.
```

```
license="LGPL-2.0-or-later"
```

```
subpackages="$pkgname-dev"
```

```
source="https://download.gnome.org/sources/libart-lgpl/2.3/libart-lgpl-$pkgver.tar.bz2"
```

```
"
```

```
builddir="$srcdir"/libart-lgpl-$pkgver
```

```
prepare() {  
  update_config_sub  
  default_prepare  
}
```

```
build() {  
  ./configure \  
  --build=$CBUILD \  
  --host=$CHOST \  
  --prefix=/usr  
  make  
}
```

```
package() {  
  make DESTDIR="$pkgdir" install  
}
```

```
sha512sums="8a632a6a4da59e5e8c02ec2f5a57e36d182b325b46513765425e5f171ff9ae326af1b133725beba28f7e7"
```

# 1.234 robot-oam-grpc 0.0.0-20240212235908-c28eadb2197a

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# 1.235 golang-lru 1.0.2

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# 1.236 aws-aws-sdk-go-v2-internal-ini 1.8.0

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# 1.237 google-uuid 1.6.0

## 1.237.1 Available under license :

Paul Borman <borman@google.com>

bmatsuo

shawnps

theory

jboverfelt

dsymonds

cd1

wallclockbuilder

dansouza

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## 1.238 zap 1.27.0

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# 1.239 ca-certificates 20240226-r0

## 1.239.1 Available under license :

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```
/* c_rehash.c - Create hash symlinks for certificates
* C implementation based on the original Perl and shell versions
*
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*
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*/
```

Found in path(s):

```
*/opt/cola/permits/1919538345_1710807720.5754924/0/ca-certificates-20230506-tar-bz2/ca-certificates-20230506/c_rehash.c
```

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```
#!/usr/bin/env perl
# *****
# *
# *      _ _ _ _ _
# * Project  _ _ | | | | _ \ | |
# *          / _ | | | | | | | |
# *          | ( _ | | | | _ < | | _ _
# *          \ _ | \ _ / | | \ \ _ _ |
# *
# * Copyright (C) 1998 - 2020, Daniel Stenberg, <daniel@haxx.se>, et al.
# *
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# *
# * *****
# * This Perl script creates a fresh ca-bundle.crt file for use with libcurl.
# * It downloads certdata.txt from Mozilla's source tree (see URL below),
# * then parses certdata.txt and extracts CA Root Certificates into PEM format.
# * These are then processed with the OpenSSL commandline tool to produce the
```

```

# final ca-bundle.crt file.
# The script is based on the parse-certs script written by Roland Krikava.
# This Perl script works on almost any platform since its only external
# dependency is the OpenSSL commandline tool for optional text listing.
# Hacked by Guenter Knauf.
#
use Encode;
use Getopt::Std;
use MIME::Base64;
use strict;
use warnings;
use vars qw($opt_b $opt_d $opt_f $opt_h $opt_i $opt_k $opt_l $opt_m $opt_n $opt_p $opt_q $opt_s $opt_t $opt_u
$opt_v $opt_w);
use List::Util;
use Text::Wrap;
use Time::Local;
my $MOD_SHA = "Digest::SHA";
eval "require
$MOD_SHA";
if ($@) {
$MOD_SHA = "Digest::SHA::PurePerl";
eval "require $MOD_SHA";
}
eval "require LWP::UserAgent";

my %urls = (
'nss' =>
'https://hg.mozilla.org/projects/nss/raw-file/default/lib/ckfw/builtins/certdata.txt',
'central' =>
'https://hg.mozilla.org/mozilla-central/raw-file/default/security/nss/lib/ckfw/builtins/certdata.txt',
'beta' =>
'https://hg.mozilla.org/releases/mozilla-beta/raw-file/default/security/nss/lib/ckfw/builtins/certdata.txt',
'release' =>
'https://hg.mozilla.org/releases/mozilla-release/raw-file/default/security/nss/lib/ckfw/builtins/certdata.txt',
);

$opt_d = 'release';

# If the OpenSSL commandline is not in search path you can configure it here!
my $openssl = 'openssl';

my $version = '1.27';

$opt_w = 76; # default base64 encoded lines length

# default cert types to include in the output (default is to include CAs which may issue SSL server certs)
my $default_mozilla_trust_purposes = "SERVER_AUTH";
my $default_mozilla_trust_levels

```

```

= "TRUSTED_DELEGATOR";
$opt_p = $default_mozilla_trust_purposes . ":" . $default_mozilla_trust_levels;

my @valid_mozilla_trust_purposes = (
    "DIGITAL_SIGNATURE",
    "NON_REPUDIATION",
    "KEY_ENCIPHERMENT",
    "DATA_ENCIPHERMENT",
    "KEY_AGREEMENT",
    "KEY_CERT_SIGN",
    "CRL_SIGN",
    "SERVER_AUTH",
    "CLIENT_AUTH",
    "CODE_SIGNING",
    "EMAIL_PROTECTION",
    "IPSEC_END_SYSTEM",
    "IPSEC_TUNNEL",
    "IPSEC_USER",
    "TIME_STAMPING",
    "STEP_UP_APPROVED"
);

my @valid_mozilla_trust_levels = (
    "TRUSTED_DELEGATOR", # CAs
    "NOT_TRUSTED",      # Don't trust these certs.
    "MUST_VERIFY_TRUST", # This explicitly tells us that it ISN'T a CA but is otherwise ok. In other words, this
                        # should tell the app to ignore any other sources that claim this is a CA.
    "TRUSTED"           # This cert is trusted, but only for itself and not for delegates (i.e. it is not a CA).
);

my $default_signature_algorithms = $opt_s = "MD5";

my @valid_signature_algorithms = (
    "MD5",
    "SHA1",
    "SHA256",
    "SHA384",
    "SHA512"
);

$0 =~ s@.*(\/\\)@@;
$Getopt::Std::STANDARD_HELP_VERSION = 1;
getopts('bd:fhiklmnp:qs:tuvw:');

if(!defined($opt_d)) {
    # to make plain "-d" use not cause warnings, and actually still work
    $opt_d = 'release';
}

```

```

# Use predefined URL or else custom URL specified on command line.
my $url;
if(defined($urls{$opt_d})) {
    $url = $urls{$opt_d};
    if(!$opt_k && $url !~ /^https:\//i) {
        die "The URL for '$opt_d' is not HTTPS. Use -k to override (insecure).\n";
    }
}
else {
    $url = $opt_d;
}

my $curl = `curl -V`;

if ($opt_i) {
    print ("=" x 78 . "\n");
    print "Script Version      : $version\n";
    print "Perl Version           : $]\n";
    print "Operating System Name    : $^O\n";
    print "Getopt::Std.pm Version   : ${Getopt::Std::VERSION}\n";
    print "Encode::Encoding.pm Version : ${Encode::Encoding::VERSION}\n";
    print "MIME::Base64.pm Version   : ${MIME::Base64::VERSION}\n";
    print "LWP::UserAgent.pm
Version      : ${LWP::UserAgent::VERSION}\n" if($LWP::UserAgent::VERSION);
    print "LWP.pm Version      : ${LWP::VERSION}\n" if($LWP::VERSION);
    print "Digest::SHA.pm Version      : ${Digest::SHA::VERSION}\n" if ($Digest::SHA::VERSION);
    print "Digest::SHA::PurePerl.pm Version : ${Digest::SHA::PurePerl::VERSION}\n" if
($Digest::SHA::PurePerl::VERSION);
    print ("=" x 78 . "\n");
}

sub warning_message() {
    if ( $opt_d =~ m/^risk$/i ) { # Long Form Warning and Exit
        print "Warning: Use of this script may pose some risk:\n";
        print "\n";
        print " 1) If you use HTTP URLs they are subject to a man in the middle attack\n";
        print " 2) Default to 'release', but more recent updates may be found in other trees\n";
        print " 3) certdata.txt file format may change, lag time to update this script\n";
        print " 4) Generally unwise to blindly trust CAs without manual review & verification\n";
        print " 5) Mozilla apps use additional security
checks aren't represented in certdata\n";
        print " 6) Use of this script will make a security engineer grind his teeth and\n";
        print "    swear at you. :)\n";
        exit;
    } else { # Short Form Warning
        print "Warning: Use of this script may pose some risk, -d risk for more details.\n";
    }
}

```

```

}

sub HELP_MESSAGE() {
    print "Usage:\t${0} [-b] [-d<certdata>] [-f] [-i] [-k] [-l] [-n] [-p<purposes:levels>] [-q] [-s<algorithms>] [-t] [-u] [-v] [-w<l>] [<outputfile>]\n";
    print "\t-b\tbackup an existing version of ca-bundle.crt\n";
    print "\t-d\tspecify Mozilla tree to pull certdata.txt or custom URL\n";
    print "\t\t Valid names are:\n";
    print "\t\t ", join( ", ", map { ( $_ =~ m/$opt_d/ ) ? "$_ (default)" : "$_" } sort keys %urls ), "\n";
    print "\t-f\tforce rebuild even if certdata.txt is current\n";
    print "\t-i\tprint version info about used modules\n";
    print "\t-k\tallow URLs other than HTTPS, enable HTTP fallback (insecure)\n";
    print "\t-l\tprint license info about certdata.txt\n";
    print "\t-m\tinclude meta data in output\n";
    print "\t-n\tno download of certdata.txt (to use existing)\n";
    print wrap("\t\t", "\t\t", "-p\tlist of Mozilla trust purposes and levels for certificates to include in output. Takes the form of a comma separated list of purposes, a colon, and a comma separated list of levels. (default: $default_mozilla_trust_purposes:$default_mozilla_trust_levels)", "\n");
    print "\t\t Valid purposes are:\n";
    print wrap("\t\t ", "\t\t ", join( ", ", "ALL", @valid_mozilla_trust_purposes ), "\n");
    print "\t\t Valid levels are:\n";
    print wrap("\t\t ", "\t\t ", join( ", ", "ALL", @valid_mozilla_trust_levels ), "\n");
    print "\t-q\tbe really quiet (no progress output at all)\n";
    print wrap("\t\t", "\t\t", "-s\tcomma separated list of certificate signatures/hashes to output in plain text mode. (default: $default_signature_algorithms)\n");
    print "\t\t Valid signature algorithms are:\n";
    print wrap("\t\t ", "\t\t ", join( ", ", "ALL", @valid_signature_algorithms ), "\n");
    print "\t-t\tinclude plain text listing of certificates\n";
    print "\t-u\tunlink (remove) certdata.txt after processing\n";
    print "\t-v\tbe verbose and print out processed CAs\n";
    print "\t-w <l>\twrap base64 output lines after <l> chars (default: ${opt_w})\n";
    exit;
}

sub VERSION_MESSAGE() {
    print "${0} version ${version} running Perl ${[]} on ${^O}\n";
}

warning_message() unless ($opt_q || $url =~ m/^(ht|f)tps:/i );
HELP_MESSAGE() if ($opt_h);

sub report($@) {
    my $output = shift;

    print STDERR $output . "\n" unless $opt_q;
}

```

```

sub is_in_list($@) {
    my $target = shift;

    return defined(List::Util::first { $target eq $_ } @_);
}

# Parses $param_string as a case insensitive comma separated list with optional whitespace
# validates that only allowed parameters are supplied
sub parse_csv_param($$@) {
    my $description = shift;
    my $param_string = shift;
    my @valid_values = @_;

    my @values = map {
        s/^\s+//; # strip leading spaces
        s/\s+$//; # strip trailing spaces
        uc $_     # return the modified string as upper case
    } split( ',', $param_string );

    # Find all values which are not in the list of valid values or "ALL"
    my @invalid = grep { !is_in_list($_,"ALL",@valid_values) } @values;

    if ( scalar(@invalid) > 0 ) {
        # Tell the user which parameters were invalid and print the standard help message which will exit
        print "Error: Invalid ", $description, scalar(@invalid) == 1 ? " ? " : "s: ", join( ", ", map { "\"$_\""} @invalid ),
        "\n";
        HELP_MESSAGE();
    }

    @values = @valid_values if ( is_in_list("ALL",@values) );

    return @values;
}

sub sha256 {
    my $result;
    if ($Digest::SHA::VERSION || $Digest::SHA::PurePerl::VERSION) {
        open(FILE, $_[0]) or die "Can't open '$_[0]': $!";
        binmode(FILE);
        $result = $MOD_SHA->new(256)->addfile(*FILE)->hexdigest;
        close(FILE);
    } else {
        # Use OpenSSL command if Perl Digest::SHA modules not available
        $result = `"$openssl" dgst -r -sha256 "$_[0]"`;
        $result =~ s/^\([0-9a-f]{64}\) .+$/1/is;
    }
    return $result;
}

```

```

}

sub oldhash {
my $hash = "";
open(C, "<$_[0]>") || return 0;
while(<C>) {
    chomp;
    if($_ =~ /^#\# SHA256: (.*)/) {
        $hash = $1;
        last;
    }
}
close(C);
return $hash;
}

if ( $opt_p !~ m:/ ) {
    print "Error: Mozilla trust identifier list must include both purposes and levels\n";
    HELP_MESSAGE();
}

(my $included_mozilla_trust_purposes_string, my $included_mozilla_trust_levels_string) = split( ':', $opt_p );
my @included_mozilla_trust_purposes = parse_csv_param( "trust purpose",
$included_mozilla_trust_purposes_string, @valid_mozilla_trust_purposes );
my @included_mozilla_trust_levels = parse_csv_param( "trust level", $included_mozilla_trust_levels_string,
@valid_mozilla_trust_levels );

my @included_signature_algorithms = parse_csv_param( "signature algorithm", $opt_s,
@valid_signature_algorithms );

sub should_output_cert(%) {
    my
    %trust_purposes_by_level = @_;

    foreach my $level (@included_mozilla_trust_levels) {
        # for each level we want to output, see if any of our desired purposes are included
        return 1 if ( defined( List::Util::first { is_in_list( $_, @included_mozilla_trust_purposes ) }
@{$trust_purposes_by_level{$level}} ) );
    }

    return 0;
}

my $crt = $ARGV[0] || 'ca-bundle.crt';
(my $txt = $url) =~ s@(\./|/?\?)*@@g;

my $stdout = $crt eq '-';

```

```

my $resp;
my $fetched;

my $oldhash = oldhash($crt);

report "SHA256 of old file: $oldhash";

if(!$opt_n) {
report "Downloading $txt ...";

# If we have an HTTPS URL then use curl
if($url =~ /^https:\//i) {
if($curl) {
if($curl =~ /^Protocols:.* https(|$)/m) {
report "Get certdata with curl!";
my $proto = !$opt_k ? "--proto =https" : "";
my $quiet = $opt_q ? "-s" : "";
my @out = `curl -w % {response_code} $proto $quiet -o "$txt" "$url"`;
if(! $? && @out && $out[0] == 200) {
$fetched = 1;
report "Downloaded $txt";
}
else {
report "Failed downloading via HTTPS with curl!";
if(-e $txt && !unlink($txt)) {
report "Failed to remove '$txt': $!";
}
}
}
else {
report "curl lacks https support";
}
}
else {
report "curl not found";
}
}

# If nothing was fetched then use LWP
if(!$fetched) {
if($url =~ /^https:\//i) {
report "Falling back to HTTP";
$url =~ s/^https:\//http:\//i;
}
if(!$opt_k) {
report "URLs other than HTTPS are disabled by default, to enable use -k";
exit 1;
}
}

```



```

report "Get certdata with LWP!";
if(!defined(${LWP::UserAgent::VERSION})) {
    report "LWP is not available (LWP::UserAgent not found)";
    exit 1;
}
my $ua = new LWP::UserAgent(agent => "$0/$version");
$ua->env_proxy();
$response = $ua->mirror($url, $txt);
if($response && $response->code eq '304') {
    report "Not modified";
    exit 0 if -e $crt && !$opt_f;
}
else {
    $fetched = 1;
    report "Downloaded $txt";
}
if(!$response || $response->code !~ /^(?:200|304)$/) {
    report "Unable to download latest data: "
        . ($response? $response->code . ' - ' . $response->message : "LWP failed");
    exit 1 if -e $crt || !-r $txt;
}
}
}

my $filedate = $response ? $response->last_modified : (stat($txt))[9];
my $datesrc = "as of";
if(!$filedate) {
    # mxr.mozilla.org gave us a time, hg.mozilla.org does not!
    $filedate = time();
    $datesrc="downloaded on";
}

# get the hash from the download file
my $newhash= sha256($txt);

if(!$opt_f && $oldhash eq $newhash) {
    report "Downloaded file identical to previous run's source file. Exiting";
    if($opt_u && -e $txt && !unlink($txt)) {
        report "Failed to remove $txt: $!\n";
    }
    exit;
}

report "SHA256 of new file: $newhash";

my $currentdate = scalar gmtime($filedate);

my $format = $opt_t ? "plain text and " : "";

```

```

if( $stdout
) {
    open(CRT, '> -') or die "Couldn't open STDOUT: $!\n";
} else {
    open(CRT, ">$crt.~") or die "Couldn't open $crt.~: $!\n";
}
print CRT <<EOT;
##
## Bundle of CA Root Certificates
##
## Certificate data from Mozilla ${datesrc}: ${currentdate} GMT
##
## This is a bundle of X.509 certificates of public Certificate Authorities
## (CA). These were automatically extracted from Mozilla's root certificates
## file (certdata.txt). This file can be found in the mozilla source tree:
## ${url}
##
## It contains the certificates in ${format}PEM format and therefore
## can be directly used with curl / libcurl / php_curl, or with
## an Apache+mod_ssl webserver for SSL client authentication.
## Just configure this file as the SSLCACertificateFile.
##
## Conversion done with mk-ca-bundle.pl version $version.
## SHA256: $newhash
##

EOT

report "Processing '$txt' ...";
my $aname;
my $certnum = 0;
my $skipnum = 0;
my $start_of_cert = 0;
my @precert;
my $cka_value;
my $valid = 1;

open(TXT, "$txt")
or die "Couldn't open $txt: $!\n";
while (<TXT>) {
    if (/^\*\*\*\* BEGIN LICENSE BLOCK \*\*\*\*\*/) {
        print CRT;
        print if ($opt_l);
        while (<TXT>) {
            print CRT;
            print if ($opt_l);
            last if (/^\*\*\*\* END LICENSE BLOCK \*\*\*\*\*);
        }
    }
}

```

```

}
elseif(/^# (Issuer|Serial Number|Subject|Not Valid Before|Not Valid After |Fingerprint \((MD5)|Fingerprint
\((SHA1)\):/) {
    push @precert, $_;
    $valid = 1;
    next;
}
elseif(/^#\^s*$/) {
    undef @precert;
    next;
}
}
chomp;

```

# Example:

```

# CKA_NSS_SERVER_DISTRICT_AFTER MULTILINE_OCTAL
# \062\060\060\066\061\067\060\060\060\060\060\132
# END

```

```

if (/^CKA_NSS_SERVER_DISTRICT_AFTER (CK_BBOOL CK_FALSE|MULTILINE_OCTAL)/) {
    if ($1 eq "MULTILINE_OCTAL") {
        my @timestamp;
        while (<TXT>) {
            last if (/^END/);
            chomp;
            my @octets = split(/\//);
            shift @octets;
            for (@octets) {
                push
                @timestamp, chr(oct);
            }
        }
        # A trailing Z in the timestamp signifies UTC
        if ($timestamp[12] ne "Z") {
            report "distrust date stamp is not using UTC";
        }
        # Example date: 200617000000Z
        # Means 2020-06-17 00:00:00 UTC
        my $distrustat =
            timegm($timestamp[10] . $timestamp[11], # second
                $timestamp[8] . $timestamp[9], # minute
                $timestamp[6] . $timestamp[7], # hour
                $timestamp[4] . $timestamp[5], # day
                ($timestamp[2] . $timestamp[3]) - 1, # month
                "20" . $timestamp[0] . $timestamp[1]); # year
        if (time >= $distrustat) {
            # not trusted anymore
            $skipnum++;
            report "Skipping: $scanname is not trusted anymore" if ($opt_v);
        }
    }
}

```

```

        $valid = 0;
    }
    else {
        # still trusted
    }
}
next;
}

# this
is a match for the start of a certificate
if (/^CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE/) {
    $start_of_cert = 1
}
if ($start_of_cert && /^CKA_LABEL UTF8 \"(.*)\"/) {
    $scaname = $1;
}
my %trust_purposes_by_level;
if ($start_of_cert && /^CKA_VALUE MULTILINE_OCTAL/) {
    $ska_value="";
    while (<TXT>) {
        last if (/^END/);
        chomp;
        my @octets = split(/\//);
        shift @octets;
        for (@octets) {
            $ska_value .= chr(oct);
        }
    }
}
if(/^CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST/ && $valid) {
    # now scan the trust part to determine how we should trust this cert
    while (<TXT>) {
        last if (/^#/);
        if (/^CKA_TRUST_([A-Z_]+)\s+CK_TRUST\s+CKT_NSS_([A-Z_]+)\s*$/) {
            if ( !is_in_list($1,@valid_mozilla_trust_purposes) ) {
                report "Warning: Unrecognized trust purpose for cert: $scaname. Trust purpose: $1. Trust Level: $2";
            } elseif ( !is_in_list($2,@valid_mozilla_trust_levels) ) {
                report "Warning:
Unrecognized trust level for cert: $scaname. Trust purpose: $1. Trust Level: $2";
            } else {
                push @{$trust_purposes_by_level{$2}}, $1;
            }
        }
    }
}

if ( !should_output_cert(%trust_purposes_by_level) ) {
    $skipnum ++;
}

```

```

report "Skipping: $scaname" if ($opt_v);
} else {
my $data = $scka_value;
$scka_value = "";
my $encoded = MIME::Base64::encode_base64($data, "");
$encoded =~ s/(\.|\{1,$opt_w\})/$1\n/g;
my $pem = "-----BEGIN CERTIFICATE-----\n"
    . $encoded
    . "-----END CERTIFICATE-----\n";
print CRT "\n$scaname\n";
print CRT @precert if($opt_m);
my $maxLength = length(decode('UTF-8', $scaname, Encode::FB_CROAK | Encode::LEAVE_SRC));
if ($opt_t) {
    foreach my $key (keys %trust_purposes_by_level) {
        my $string = $key . ": " . join(" ", @{$trust_purposes_by_level{$key}});
        $maxLength = List::Util::max( length($string), $maxLength
);
        print CRT $string . "\n";
    }
}
print CRT ("=" x $maxLength . "\n");
if (!$opt_t) {
    print CRT $pem;
} else {
my $pipe = "";
foreach my $hash (@included_signature_algorithms) {
    $pipe = "|$openssl x509 -" . $hash . " -fingerprint -noout -inform PEM";
    if (!$stdout) {
        $pipe .= " >> $crt.~";
        close(CRT) or die "Couldn't close $crt.~: $!";
    }
    open(TMP, $pipe) or die "Couldn't open openssl pipe: $!";
    print TMP $pem;
    close(TMP) or die "Couldn't close openssl pipe: $!";
    if (!$stdout) {
        open(CRT, ">>$crt.~") or die "Couldn't open $crt.~: $!";
    }
}
$pipe = "|$openssl x509 -text -inform PEM";
if (!$stdout) {
    $pipe .= " >> $crt.~";
    close(CRT) or die "Couldn't close $crt.~: $!";
}
open(TMP, $pipe) or die "Couldn't open openssl pipe: $!";
print TMP
$pem;
close(TMP) or die "Couldn't close openssl pipe: $!";
if (!$stdout) {

```

```

    open(CRT, ">>${cert.~}") or die "Couldn't open ${cert.~}: $!";
  }
}
report "Parsing: $aname" if ($opt_v);
$certnum ++;
$start_of_cert = 0;
}
undef @precert;
}

}
close(TXT) or die "Couldn't close $txt: $!\n";
close(CRT) or die "Couldn't close ${cert.~}: $!\n";
unless( $stdout ) {
  if ($opt_b && -e $cert) {
    my $bk = 1;
    while (-e "${cert.~}${bk}~") {
      $bk++;
    }
    rename $cert, "${cert.~}${bk}~" or die "Failed to create backup ${cert.~}${bk}~: $!\n";
  } elsif( -e $cert ) {
    unlink( $cert ) or die "Failed to remove $cert: $!\n";
  }
  rename "${cert.~}", $cert or die "Failed to rename ${cert.~} to $cert: $!\n";
}
if($opt_u && -e $txt && !unlink($txt)) {
  report "Failed to remove $txt: $!\n";
}
report "Done ($certnum CA certs processed, $skipnum skipped).";

```

Found in path(s):

```
* /opt/cola/permits/1919538345_1710807720.5754924/0/ca-certificates-20230506-tar-bz2/ca-certificates-20230506/mk-ca-bundle.pl
```

## 1.240 klauspost-compress 1.17.7

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# 1.241 google-golang-org-genproto 0.0.0-20240228224816-df926f6c8641

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## 1.244 c-ares 1.27.0-r0

### 1.244.1 Available under license :

# c-ares license

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## 1.245 aws-aws-sdk-go-v2 1.30.3

### 1.245.1 Available under license :

name: License Scan

on: [pull\_request]

jobs:

licensescan:

name: License Scan

runs-on: ubuntu-latest

strategy:



```

matrix:
  python-version: [3.9]

steps:
  - name: Checkout target
    uses: actions/checkout@v2
    with:
      path: sdkbase
      ref: ${ github.base_ref }
  - name: Checkout this ref
    uses: actions/checkout@v2
    with:
      path: new-ref
      fetch-depth: 0
  - name: Get Diff
    run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${ github.event.pull_request.base.sha }
    ${{ github.sha }} > refDiffFiles.txt
  - name: Get Target Files
    run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
  - name: Checkout scancode
    uses: actions/checkout@v2
    with:
      repository: nexB/scancode-toolkit
      path: scancode-toolkit
      fetch-depth: 1
  - name: Set up Python ${ matrix.python-version }
    uses: actions/setup-python@v2
    with:
      python-version: ${ matrix.python-version }
  # ScanCode
  - name: Self-configure scancode
    working-directory: ./scancode-toolkit
    run: ./scancode --help
  - name: Run Scan code on target
    run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
    toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
  - name: Run Scan code on pr ref
    run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-
    toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
  # compare
  - name: License test
    run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses
    are the same. Success."; exit 0; fi
CreateLicense
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger

```

OperationInputValidation  
Serialize stack step  
setOperationInput  
ResolveEndpoint  
OperationSerializer  
Build stack step  
ClientRequestID  
ComputeContentLength  
UserAgent  
AddTimeOffsetMiddleware  
RecursionDetection  
Finalize stack step  
ResolveAuthScheme  
GetIdentity  
ResolveEndpointV2  
disableHTTPS  
ComputePayloadHash  
Retry  
RetryMetricsHeader  
setLegacyContextSigningOptions  
Signing  
Deserialize stack step  
AddRawResponseToMetadata  
ErrorCloseResponseBody  
CloseResponseBody  
ResponseErrorWrapper  
RequestIDRetriever  
OperationDeserializer  
AddTimeOffsetMiddleware  
RecordResponseTiming  
RequestResponseLogger  
ListReceivedLicenses  
Initialize stack step  
RegisterServiceMetadata  
legacyEndpointContextSetter  
SetLogger  
Serialize stack step  
setOperationInput  
ResolveEndpoint  
OperationSerializer  
Build stack step  
ClientRequestID  
ComputeContentLength  
UserAgent  
AddTimeOffsetMiddleware  
RecursionDetection  
Finalize stack step  
ResolveAuthScheme

```

GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
Retry
RetryMetricsHeader
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
    "context"
    "fmt"
    awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
    "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
    "github.com/aws/smithy-go/middleware"
    smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
//
// If the account that created the license is the same that is performing the
// check out, you must specify the account as the beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
    if params == nil {
        params = &CheckoutLicenseInput{}
    }

    result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
    if err != nil {
        return nil, err
    }

    out := result.(*CheckoutLicenseOutput)

```

```

out.ResultMetadata = metadata
return out, nil
}

type CheckoutLicenseInput struct {

    //
    Checkout type.
    //
    // This member is required.
    CheckoutType types.CheckoutType

    // Unique, case-sensitive identifier that you provide to ensure the idempotency of
    // the request.
    //
    // This member is required.
    ClientToken *string

    // License entitlements.
    //
    // This member is required.
    Entitlements []types.EntitlementData

    // Key fingerprint identifying the license.
    //
    // This member is required.
    KeyFingerprint *string

    // Product SKU.
    //
    // This member is required.
    ProductSKU *string

    // License beneficiary.
    Beneficiary *string

    // Node ID.
    NodeId *string

    noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

    // Checkout type.
    CheckoutType types.CheckoutType

    // Allowed license entitlements.

```

```

EntitlementsAllowed []types.EntitlementData

// Date and time at which the license checkout expires.
Expiration *string

// Date and time at which the license checkout is issued.
IssuedAt *string

// Amazon Resource Name (ARN) of the checkout license.
LicenseArn
*string

// License consumption token.
LicenseConsumptionToken *string

// Node ID.
NodeId *string

// Signed token.
SignedToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
    if err := stack.Serialize.Add(&setOperationInputMiddleware{ }, middleware.After); err != nil {
        return err
    }
    err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{ }, middleware.After)
    if err != nil {
        return err
    }
    err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{ }, middleware.After)
    if err != nil {
        return err
    }
    if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
        return fmt.Errorf("add protocol finalizers: %v", err)
    }

    if err = addLegacyEndpointContextSetter(stack, options); err != nil {
        return err
    }
    if err = addSetLoggerMiddleware(stack,

```

```

options); err != nil {
    return err
}
if err = addClientRequestID(stack); err != nil {
    return err
}
if err = addComputeContentLength(stack); err != nil {
    return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
    return err
}
if err = addComputePayloadSHA256(stack); err != nil {
    return err
}
if err = addRetry(stack, options); err != nil {
    return err
}
if err = addRawResponseToMetadata(stack); err != nil {
    return err
}
if err = addRecordResponseTiming(stack); err != nil {
    return err
}
if err = addClientUserAgent(stack, options); err != nil {
    return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
    return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
    return err
}
if err = addUserAgentRetryMode(stack,
options); err != nil {
    return err
}
if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
    return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {

```

```

    return err
}
if err = addRecursionDetection(stack); err != nil {
    return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
    return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
    return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
    return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
    return err
}
return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
    return &awsmiddleware.RegisterServiceMetadata{
        Region:    region,
        ServiceID: ServiceID,
        OperationName: "CheckoutLicense",
    }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
    "context"
    "fmt"
    awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
    "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
    "github.com/aws/smithy-go/middleware"
    smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
    if params == nil {
        params = &CreateLicenseInput{}
    }
}

```

```

result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
if err != nil {
    return nil, err
}

out := result.(*CreateLicenseOutput)
out.ResultMetadata = metadata
return out, nil
}

type CreateLicenseInput struct {

    // License beneficiary.
    //
    // This member is required.
    Beneficiary *string

    // Unique, case-sensitive identifier that you provide to ensure the idempotency of
    // the request.
    //
    //
    // This member is required.
    ClientToken *string

    // Configuration for consumption of the license. Choose a provisional
    // configuration for workloads running with continuous connectivity. Choose a
    // borrow configuration for workloads with offline usage.
    //
    // This member is required.
    ConsumptionConfiguration *types.ConsumptionConfiguration

    // License entitlements.
    //
    // This member is required.
    Entitlements []types.Entitlement

    // Home Region for the license.
    //
    // This member is required.
    HomeRegion *string

    // License issuer.
    //
    // This member is required.
    Issuer *types.Issuer

    // License name.

```



```

//
// This member is required.
LicenseName *string

// Product name.
//
// This member is required.
ProductName *string

// Product SKU.
//
// This member is required.
ProductSKU *string

// Date and time range during which the license is valid, in ISO8601-UTC format.
//
// This member is required.
Validity *types.DatetimeRange

// Information about
the license.
LicenseMetadata []types.Metadata

noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

// Amazon Resource Name (ARN) of the license.
LicenseArn *string

// License status.
Status types.LicenseStatus

// License version.
Version *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
if err := stack.Serialize.Add(&setOperationInputMiddleware{ }, middleware.After); err != nil {
return err
}
err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{ }, middleware.After)

```

```

if err != nil {
    return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{ }, middleware.After)
if err != nil {
    return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
    return fmt.Errorf("add protocol finalizers: %v", err)
}

if
err = addLegacyEndpointContextSetter(stack, options); err != nil {
    return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
    return err
}
if err = addClientRequestID(stack); err != nil {
    return err
}
if err = addComputeContentLength(stack); err != nil {
    return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
    return err
}
if err = addComputePayloadSHA256(stack); err != nil {
    return err
}
if err = addRetry(stack, options); err != nil {
    return err
}
if err = addRawResponseToMetadata(stack); err != nil {
    return err
}
if err = addRecordResponseTiming(stack); err != nil {
    return err
}
if err = addClientUserAgent(stack, options); err != nil {
    return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
}

```

```

if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
    return
    err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
    return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
    return err
}
if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
    return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
    return err
}
if err = addRecursionDetection(stack); err != nil {
    return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
    return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
    return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
    return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
    return err
}
return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
return &awsmiddleware.RegisterServiceMetadata{
    Region:    region,
    ServiceID: ServiceID,
    OperationName:
"CreateLicense",
}
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (

```

```

"context"
"fmt"
awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
"github.com/aws/aws-sdk-go-v2/service/grafana/types"
"github.com/aws/smithy-go/middleware"
smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
if params == nil {
params = &DisassociateLicenseInput{}
}

result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
if err != nil {
return nil, err
}

out := result.(*DisassociateLicenseOutput)
out.ResultMetadata = metadata
return out, nil
}

type DisassociateLicenseInput struct {

// The type of license to remove from the workspace.
//
// This member is required.
LicenseType types.LicenseType

//
The ID of the workspace to remove the Grafana Enterprise license from.
//
// This member is required.
WorkspaceId *string

noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

// A structure containing information about the workspace.
//
// This member is required.
Workspace *types.WorkspaceDescription

```

```

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
if err := stack.Serialize.Add(&setOperationInputMiddleware{ }, middleware.After); err != nil {
return err
}
err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{ }, middleware.After)
if err != nil {
return err
}
err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{ }, middleware.After)
if err != nil {
return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
err != nil {
return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addLegacyEndpointContextSetter(stack, options); err != nil {
return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
return err
}
if err = addClientRequestID(stack); err != nil {
return err
}
if err = addComputeContentLength(stack); err != nil {
return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
return err
}
if err = addComputePayloadSHA256(stack); err != nil {
return err
}
if err = addRetry(stack, options); err != nil {
return err
}
if err = addRawResponseToMetadata(stack); err != nil {
return err
}

```

```

}
if err = addRecordResponseTiming(stack); err != nil {
    return err
}
if err = addClientUserAgent(stack, options); err != nil {
    return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil
{
    return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
    return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
    return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
    return err
}
if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
    return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
    return err
}
if err = addRecursionDetection(stack); err != nil {
    return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
    return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
    return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
    return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
    return err
}
return nil
}

```

```

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata
{
return &awsmiddleware.RegisterServiceMetadata{
Region:    region,
ServiceID: ServiceID,
OperationName: "DisassociateLicense",
}
}
CheckoutLicense
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
Retry
RetryMetricsHeader
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
DisassociateLicense
Initialize stack step
RegisterServiceMetadata

```

legacyEndpointContextSetter  
SetLogger  
OperationInputValidation  
Serialize stack step  
setOperationInput  
ResolveEndpoint  
OperationSerializer  
Build stack step  
ClientRequestID  
ComputeContentLength  
UserAgent  
AddTimeOffsetMiddleware  
RecursionDetection  
Finalize stack step  
ResolveAuthScheme  
GetIdentity  
ResolveEndpointV2  
disableHTTPS  
ComputePayloadHash  
Retry  
RetryMetricsHeader  
setLegacyContextSigningOptions  
Signing  
Deserialize stack step  
AddRawResponseToMetadata  
ErrorCloseResponseBody  
CloseResponseBody  
ResponseErrorWrapper  
RequestIDRetriever  
OperationDeserializer  
AddTimeOffsetMiddleware  
RecordResponseTiming  
RequestResponseLogger  
CheckoutBorrowLicense  
Initialize stack step  
RegisterServiceMetadata  
legacyEndpointContextSetter  
SetLogger  
OperationInputValidation  
Serialize stack step  
setOperationInput  
ResolveEndpoint  
OperationSerializer  
Build stack step  
ClientRequestID  
ComputeContentLength  
UserAgent  
AddTimeOffsetMiddleware



```

RecursionDetection
Finalize stack step
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
Retry
RetryMetricsHeader
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
    "context"
    "fmt"
    awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
    "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
    "github.com/aws/smithy-go/middleware"
    smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
..func(*Options)) (*ListReceivedLicensesOutput, error) {
    if params == nil {
        params = &ListReceivedLicensesInput{}
    }

    result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
    if err != nil {
        return nil, err
    }

    out := result.(*ListReceivedLicensesOutput)

```

```

out.ResultMetadata = metadata
return out, nil
}

type ListReceivedLicensesInput struct {

// Filters to scope the results. The following filters are supported:
//
// - ProductSKU
//
// - Status
//
//
// - Fingerprint
//
// - IssuerName
//
// - Beneficiary
Filters []types.Filter

// Amazon Resource Names (ARNs) of the licenses.
LicenseArns []string

// Maximum number of results to return in a single call.
MaxResults *int32

// Token for the next set of results.
NextToken *string

noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

// Received license details.
Licenses []types.GrantedLicense

// Token for the next set of results.
NextToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {

```

```

if err := stack.Serialize.Add(&setOperationInputMiddleware{ }, middleware.After); err != nil {
    return err
}
err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{ }, middleware.After)
if err != nil {
    return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{ },
middleware.After)
if err != nil {
    return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
    return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addLegacyEndpointContextSetter(stack, options); err != nil {
    return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
    return err
}
if err = addClientRequestID(stack); err != nil {
    return err
}
if err = addComputeContentLength(stack); err != nil {
    return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
    return err
}
if err = addComputePayloadSHA256(stack); err != nil {
    return err
}
if err = addRetry(stack, options); err != nil {
    return err
}
if err = addRawResponseToMetadata(stack); err != nil {
    return err
}
if err = addRecordResponseTiming(stack); err != nil {
    return err
}
if err = addClientUserAgent(stack, options); err != nil {
    return err
}
if err

```

```

= smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
    return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
    return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
    return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
    return err
}
if err = addRecursionDetection(stack); err != nil {
    return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
    return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
    return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
    return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
    return err
}
return nil
}

```

```

func newServiceMetadataMiddleware_opListReceivedLicenses(region
string) *awsmiddleware.RegisterServiceMetadata {
return &awsmiddleware.RegisterServiceMetadata{
    Region:    region,
    ServiceID: ServiceID,
    OperationName: "ListReceivedLicenses",
}
}
AssociateLicense
Initialize stack step
RegisterServiceMetadata

```

```

legacyEndpointContextSetter
SetLogger
OperationInputValidation
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
Retry
RetryMetricsHeader
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
    "context"
    "fmt"
    awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
    "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
    "github.com/aws/smithy-go/middleware"
    smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))

```

```

(*GetLicenseOutput, error) {
    if params == nil {
        params = &GetLicenseInput{}
    }

    result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
    if err != nil {
        return nil, err
    }

    out := result.(*GetLicenseOutput)
    out.ResultMetadata = metadata
    return out, nil
}

type GetLicenseInput struct {

    // Amazon Resource Name (ARN) of the license.
    //
    // This member is required.
    LicenseArn *string

    // License version.
    Version *string

    noSmithyDocumentSerde
}

type
GetLicenseOutput struct {

    // License details.
    License *types.License

    // Metadata pertaining to the operation's result.
    ResultMetadata middleware.Metadata

    noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
    if err := stack.Serialize.Add(&setOperationInputMiddleware{ }, middleware.After); err != nil {
        return err
    }
    err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{ }, middleware.After)
    if err != nil {
        return err
    }
}

```

```

}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{ }, middleware.After)
if err != nil {
    return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
    return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addLegacyEndpointContextSetter(stack, options); err != nil {
    return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
    return err
}
if err = addClientRequestID(stack); err
!= nil {
    return err
}
if err = addComputeContentLength(stack); err != nil {
    return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
    return err
}
if err = addComputePayloadSHA256(stack); err != nil {
    return err
}
if err = addRetry(stack, options); err != nil {
    return err
}
if err = addRawResponseToMetadata(stack); err != nil {
    return err
}
if err = addRecordResponseTiming(stack); err != nil {
    return err
}
if err = addClientUserAgent(stack, options); err != nil {
    return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
    return err
}

```

```

}
if err = addTimeOffsetBuild(stack, c); err != nil {
    return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
    return err
}
if err = addOpGetLicenseValidationMiddleware(stack);
err != nil {
    return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
    return err
}
if err = addRecursionDetection(stack); err != nil {
    return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
    return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
    return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
    return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
    return err
}
return nil
}

```

```

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
    return &awsmiddleware.RegisterServiceMetadata{
        Region:    region,
        ServiceID: ServiceID,
        OperationName: "GetLicense",
    }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

```

```
package grafana
```

```

import (
    "context"
    "fmt"
    awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"

```



```

"github.com/aws/aws-sdk-go-v2/service/grafana/types"
"github.com/aws/smithy-go/middleware"
smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. To upgrade, you must use
// ENTERPRISE for the licenseType , and pass in a valid Grafana Labs token for the
// grafanaToken . Upgrading to Grafana Enterprise incurs additional fees. For more
// information, see [Upgrade a workspace to Grafana Enterprise].
//
// [Upgrade a workspace to Grafana Enterprise]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-Grafana-Enterprise.html
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
    if params == nil {
        params = &AssociateLicenseInput{}
    }

    result, metadata, err := c.invokeOperation(ctx,
        "AssociateLicense", params, optFns, c.addOperationAssociateLicenseMiddlewares)
    if err != nil {
        return nil, err
    }

    out := result.(*AssociateLicenseOutput)
    out.ResultMetadata = metadata
    return out, nil
}

type AssociateLicenseInput struct {

    // The type of license to associate with the workspace.
    //
    // Amazon Managed Grafana workspaces no longer support Grafana Enterprise free
    // trials.
    //
    // This member is required.
    LicenseType types.LicenseType

    // The ID of the workspace to associate the license with.
    //
    // This member is required.
    WorkspaceId *string

    // A token from Grafana Labs that ties your Amazon Web Services account with a
    // Grafana Labs account. For more information, see [Link your account with Grafana Labs].
    //
    // [Link your account with Grafana Labs]: 


---



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```

Grafana-Enterprise.html#AMG-workspace-register-enterprise

GrafanaToken \*string

noSmithyDocumentSerde

}

type AssociateLicenseOutput

struct {

// A structure containing data about the workspace.

//

// This member is required.

Workspace \*types.WorkspaceDescription

// Metadata pertaining to the operation's result.

ResultMetadata middleware.Metadata

noSmithyDocumentSerde

}

func (c \*Client) addOperationAssociateLicenseMiddlewares(stack \*middleware.Stack, options Options) (err error) {

if err := stack.Serialize.Add(&setOperationInputMiddleware{ }, middleware.After); err != nil {

return err

}

err = stack.Serialize.Add(&awsRestjson1\_serializeOpAssociateLicense{ }, middleware.After)

if err != nil {

return err

}

err = stack.Deserialize.Add(&awsRestjson1\_deserializeOpAssociateLicense{ }, middleware.After)

if err != nil {

return err

}

if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {

return fmt.Errorf("add protocol finalizers: %v", err)

}

if err = addLegacyEndpointContextSetter(stack, options); err != nil {

return err

}

if err = addSetLoggerMiddleware(stack,

options); err != nil {

return err

}

if err = addClientRequestID(stack); err != nil {

return err

}

if err = addComputeContentLength(stack); err != nil {

return err

```

}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
    return err
}
if err = addComputePayloadSHA256(stack); err != nil {
    return err
}
if err = addRetry(stack, options); err != nil {
    return err
}
if err = addRawResponseToMetadata(stack); err != nil {
    return err
}
if err = addRecordResponseTiming(stack); err != nil {
    return err
}
if err = addClientUserAgent(stack, options); err != nil {
    return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
    return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
    return err
}
if err = addUserAgentRetryMode(stack,
options); err != nil {
    return err
}
if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
    return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
    return err
}
if err = addRecursionDetection(stack); err != nil {
    return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
    return err
}
}

```

```

if err = addResponseErrorMiddleware(stack); err != nil {
    return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
    return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
    return err
}
return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
return &awsmiddleware.RegisterServiceMetadata{
    Region:    region,
    ServiceID: ServiceID,
    OperationName: "AssociateLicense",
}
}
ListLicenses
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
Retry
RetryMetricsHeader
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody

```

CloseResponseBody  
ResponseErrorWrapper  
RequestIDRetriever  
OperationDeserializer  
AddTimeOffsetMiddleware  
RecordResponseTiming  
RequestResponseLogger

AWS SDK for Go

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```
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
      "type": "integer"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
      "type": "long"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerError"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
        }
      ],
      {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
      },
      {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
      }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Remove a third-party subscription provider from the Bring Your Own License (BYOL) subscriptions \n\t\t\tregistered to your account.</p>",
      "smithy.api#http": {
        "code": 200,
        "method": "POST",
```

```

        "uri": "/subscription/DeregisterSubscriptionProvider"
    },
    "smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest": {
    "type": "structure",
    "members": {
        "SubscriptionProviderArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the subscription provider resource to deregister.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse": {
    "type": "structure",
    "members": {},
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The type of name to filter by.</p>"
            }
        },
        "Values": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
            "traits": {
                "smithy.api#documentation": "<p>One or more values for the name to filter by.</p>"
            }
        }
    },
    "Operator": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
        "traits": {
            "smithy.api#documentation": "<p>An operator for filtering results.</p>"
        }
    }
}

```

```

    }
  },
  "traits": {
    "smithy.api#documentation": "<p>A filter object that is used to return more specific results from a describe operation.\n  Filters can be used to match a set of resources by specific criteria.</p>"
  }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
  "type":
"list",
  "member": {
    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
  }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest"
  },
  "output": {
    "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerErrorException"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Get details for a Bring Your Own License (BYOL) subscription that's registered to your account.</p>",
    "smithy.api#http": {
      "code": 200,
      "method": "POST",
      "uri": "/subscription/GetRegisteredSubscriptionProvider"
    },
    "smithy.api#idempotent": {}
  }
},

```

```

"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest": {
  "type": "structure",
  "members": {
    "SubscriptionProviderArn": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
      "traits": {
        "smithy.api#documentation":
"<p>The Amazon Resource Name (ARN) of the BYOL registration resource to get details for.</p>",
        "smithy.api#required": {}
      }
    },
    "traits": {
      "smithy.api#input": {}
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse": {
    "type": "structure",
    "members": {
      "SubscriptionProviderArn": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
        "traits": {
          "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for the BYOL registration
resource specified in the request.</p>"
        }
      },
      "SubscriptionProviderSource": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",

        "traits": {
          "smithy.api#documentation": "<p>The subscription provider for the BYOL registration resource
specified \n\t\t\tin the request.</p>"
        }
      },
      "SecretArn": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
        "traits": {
          "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the third-party access
secret stored in Secrets Manager for the BYOL \n\t\t\tregistration resource specified in the request.</p>"
        }
      },
      "SubscriptionProviderStatus": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
        "traits": {
          "smithy.api#documentation": "<p>The status of the Linux subscription provider access token from the
last \n\t\t\tsuccessful subscription data request.</p>"
        }
      }
    },
  },

```





```

    }
  },
  "com.amazonaws.licenseanagerlinuxsubscriptions#GetServiceSettingsRequest": {
    "type": "structure",
    "members": {}
  },
  "com.amazonaws.licenseanagerlinuxsubscriptions#GetServiceSettingsResponse": {
    "type": "structure",
    "members": {
      "LinuxSubscriptionsDiscovery": {
        "target": "com.amazonaws.licenseanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
        "traits": {
          "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
        }
      },
      "LinuxSubscriptionsDiscoverySettings": {
        "target": "com.amazonaws.licenseanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
        "traits": {
          "smithy.api#documentation": "<p>Lists
the settings defined for Linux subscriptions discovery. The settings include if Organizations integration has
been enabled, and which Regions data will be aggregated from.</p>"
        }
      },
      "Status": {
        "target": "com.amazonaws.licenseanagerlinuxsubscriptions#Status",
        "traits": {
          "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being
applied.</p>"
        }
      },
      "StatusMessage": {
        "target": "com.amazonaws.licenseanagerlinuxsubscriptions#StringMap",
        "traits": {
          "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings
current status.</p>"
        }
      },
      "HomeRegions": {
        "target": "com.amazonaws.licenseanagerlinuxsubscriptions#StringList",
        "traits": {
          "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux subscriptions.</p>"
        }
      }
    }
  },
  "com.amazonaws.licenseanagerlinuxsubscriptions#Instance": {
    "type": "structure",

```

```

"members": {
  "AmiId": {
    "target": "smithy.api#String",
    "traits": {
      "smithy.api#documentation": "<p>The AMI ID used to launch the instance.</p>"
    }
  },
  "InstanceID": {
    "target": "smithy.api#String",
    "traits": {
      "smithy.api#documentation": "<p>The instance ID of the resource.</p>"
    }
  },
  "InstanceType": {
    "target": "smithy.api#String",
    "traits": {
      "smithy.api#documentation": "<p>The instance type of the resource.</p>"
    }
  },
  "AccountID": {
    "target": "smithy.api#String",
    "traits": {
      "smithy.api#documentation": "<p>The account ID which owns the instance.</p>"
    }
  },
  "Status": {
    "target": "smithy.api#String",
    "traits": {
      "smithy.api#documentation": "<p>The status of the instance.</p>"
    }
  },
  "Region": {
    "target": "smithy.api#String",
    "traits": {
      "smithy.api#documentation": "<p>The Region the instance is running in.</p>"
    }
  },
  "UsageOperation": {
    "target": "smithy.api#String",

    "traits": {
      "smithy.api#documentation": "<p>The usage operation of the instance. For more information, see For
more information, see\n      <a href='\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-
subscriptions-usage-operation.html\">Usage\n      operation values</a> in the <i>License Manager User
Guide</i>.</p>"
    }
  },

```

```

"ProductCode": {
  "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
  "traits": {
    "smithy.api#documentation": "<p>The product code for the instance. For more information, see <a href=\\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\\n    operation values</a> in the <i>License Manager User Guide</i> .</p>"
  }
},
"LastUpdatedTime": {
  "target": "smithy.api#String",
  "traits": {
    "smithy.api#documentation": "<p>The time in which the last discovery updated the instance details.</p>"
  }
},
"SubscriptionName": {
  "target": "smithy.api#String",
  "traits": {
    "smithy.api#documentation": "<p>The name of the license subscription that the instance uses.</p>"
  }
},
"OsVersion": {
  "target": "smithy.api#String",
  "traits": {
    "smithy.api#documentation": "<p>The operating system software version that runs on your instance.</p>"
  }
},
"SubscriptionProviderCreateTime": {
  "target": "smithy.api#String",
  "traits": {
    "smithy.api#documentation": "<p>The timestamp when you registered the third-party Linux subscription \\n\\t\\tprovider for the subscription that the instance uses.</p>"
  }
},
"SubscriptionProviderUpdateTime": {
  "target": "smithy.api#String",
  "traits": {
    "smithy.api#documentation": "<p>The timestamp from the last time that the instance synced with the registered \\n\\t\\tthird-party Linux subscription provider.</p>"
  }
},
"DualSubscription": {
  "target": "smithy.api#String",
  "traits": {
    "smithy.api#documentation": "<p>Indicates that you have two different license subscriptions for \\n\\t\\tthe same software on your instance.</p>"
  }
}

```



```

    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
  },
  {
    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"
  },
  {
    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders"
  },
  {
    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource"
  },
  {
    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider"
  },
  {
    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource"
  },
  {
    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource"
  },
  {
    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
  }
],
"traits": {
  "aws.api#service": {
    "sdkId": "License Manager Linux Subscriptions",
    "arnNamespace": "license-manager-linux-subscriptions",
    "cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
  },
  "aws.auth#sigv4": {
    "name": "license-manager-linux-subscriptions"
  },
  "aws.protocols#restJson1": {},
  "smithy.api#cors": {
    "additionalAllowedHeaders": [
      "*",
      "content-type",
      "x-amz-content-sha256",
      "x-amz-user-agent",
      "x-amzn-platform-id",
      "x-amzn-trace-id"
    ],
    "additionalExposedHeaders": [
      "x-amzn-errortype",
      "x-amzn-requestid",
      "x-amzn-trace-id"
    ]
  }
}

```

```

    },
    "smithy.api#documentation": "<p>With License Manager,
you can discover and track your commercial Linux subscriptions on running\n Amazon EC2 instances.</p>",
    "smithy.api#title": "AWS License Manager Linux Subscriptions",
    "smithy.rules#endpointRuleSet": {
      "version": "1.0",
      "parameters": {
        "Region": {
          "builtIn": "AWS::Region",
          "required": false,
          "documentation": "The AWS region used to dispatch the request.",
          "type": "String"
        },
        "UseDualStack": {
          "builtIn": "AWS::UseDualStack",
          "required": true,
          "default": false,
          "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not
support dual-stack, dispatching the request MAY return an error.",
          "type": "Boolean"
        },
        "UseFIPS": {
          "builtIn": "AWS::UseFIPS",
          "required": true,
          "default": false,
          "documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the
configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
          "type": "Boolean"
        },
        "Endpoint": {
          "builtIn": "SDK::Endpoint",
          "required": false,
          "documentation": "Override the endpoint used to send this request",
          "type": "String"
        }
      }
    },
    "rules": [
      {
        "conditions": [
          {
            "fn": "isSet",
            "argv": [
              {
                "ref": "Endpoint"
              }
            ]
          }
        ]
      }
    ]
  },

```

```

"rules": [
  {
    "conditions": [
      {
        "fn": "booleanEquals",
        "argv": [
          {
            "ref": "UseFIPS"
          },
          true
        ]
      }
    ]
  },
  {
    "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
    "type": "error"
  },
  {
    "conditions": [],
    "rules": [
      {
        "conditions": [
          {
            "fn": "booleanEquals",
            "argv": [
              {
                "ref": "UseDualStack"
              },
              true
            ]
          }
        ]
      }
    ]
  },
  {
    "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
    "type": "error"
  },
  {
    "conditions": [],
    "endpoint": {
      "url": {
        "ref": "Endpoint"
      },
      "properties": {},
      "headers": {}
    },
    "type": "endpoint"
  }
],

```



```

        "type": "tree"
    }
  ],
  "type": "tree"
},
{
  "conditions": [],
  "rules": [
    {
      "conditions": [
        {
          "fn": "isSet",
          "argv": [
            {
              "ref": "Region"
            }
          ]
        }
      ],
      "rules": [
        {
          "conditions": [
            {
              "fn": "aws.partition",
              "argv": [
                {
                  "ref": "Region"
                }
              ],
              "assign": "PartitionResult"
            }
          ],
          "rules": [
            {
              "conditions": [
                {
                  "fn": "booleanEquals",
                  "argv": [
                    {
                      "ref": "UseFIPS"
                    },
                    true
                  ]
                }
              ],
            }
          ]
        }
      ]
    }
  ]
}

```

```

    "fn": "booleanEquals",
    "argv": [
      {
        "ref": "UseDualStack"
      },
      true
    ]
  }
],

"rules": [
  {
    "conditions": [
      {
        "fn": "booleanEquals",
        "argv": [
          true,
          {
            "fn": "getAttr",
            "argv": [
              {
                "ref": "PartitionResult"
              }
            ]
          }
        ]
      },
      {
        "fn": "booleanEquals",
        "argv": [
          true,
          {
            "fn": "getAttr",
            "argv": [
              {
                "ref": "PartitionResult"
              },
              {
                "ref": "PartitionResult"
              }
            ]
          }
        ]
      }
    ]
  },
  {
    "fn": "booleanEquals",
    "argv": [
      true,
      {
        "fn": "getAttr",
        "argv": [
          {
            "ref": "PartitionResult"
          },
          {
            "ref": "PartitionResult"
          }
        ]
      }
    ]
  }
],
"rules": [
  {

```

```

        "conditions": [],

"rules": [

        {
            "conditions": [],
            "endpoint": {
                "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                "properties": {},
                "headers": {}
            },
            "type": "endpoint"
        }
    ],

    "type": "tree"
    },
    "type": "tree"
    },
    {
        "conditions": [],
        "error": "FIPS and DualStack are enabled, but this partition does not support
one or both",
        "type": "error"
    }
    ],
    "type": "tree"
    },
    {

"conditions": [

        {
            "fn": "booleanEquals",
            "argv": [
                {
                    "ref": "UseFIPS"
                },
                true
            ]
        }
    ],
    "rules": [
        {
            "conditions": [
                {

```

```

    "fn": "booleanEquals",
      "argv": [
        {
          "fn": "getAttr",
          "argv": [
            {
              "ref": "PartitionResult"
            },
            "supportsFIPS"
          ]
        }
      ],
      true
    ]
  },
  "rules": [
    {
      "conditions": [],
      "rules": [
        {
          "conditions": [],
          "endpoint": {
            "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dnsSuffix}",
            "properties": {},
            "headers": {}
          },
          "type": "endpoint"
        }
      ],
      "type": "tree"
    },
    {
      "type": "tree"
    },
    {
      "conditions": [],
      "error": "FIPS is enabled
but this partition does not support FIPS",
      "type": "error"
    }
  ],
  "type": "tree"
},
{
  "conditions": [

```

```

    {
      "fn": "booleanEquals",
      "argv": [
        {
          "ref": "UseDualStack"
        },
        true
      ]
    }
  ],
  "rules": [
    {
      "conditions": [
        {
          "fn": "booleanEquals",
          "argv": [
            true,
            {
              "fn": "getAttr",
              "argv": [
                {
                  "ref": "PartitionResult"
                },
                "supportsDualStack"
              ]
            }
          ]
        }
      ]
    }
  ],
  "rules": [
    {
      "conditions": [],
      "rules": [
        {
          "conditions": [],
          "endpoint": {
            "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
            "properties": {},
            "headers": {}
          },
          "type": "endpoint"
        }
      ]
    }
  ],
  "type": "tree"
}

```

```

    }
    ],
    "type": "tree"
  },
  {
    "conditions": [],
    "error": "DualStack is enabled but this partition does not support DualStack",
    "type": "error"
  }
],
"type": "tree"
},
{
  "conditions": [],
  "rules": [
    {
      "conditions": [],
      "endpoint": {
        "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",
        "properties": {},
        "headers": {}
      },
      "type": "endpoint"
    }
  ],
  "type": "tree"
}
],
"type": "tree"
}
],
"type": "tree"
},
{
  "conditions": [],
  "error": "Invalid Configuration: Missing Region",
  "type": "error"
}
],
"type": "tree"
}
]
},
"smithy.rules#endpointTests": {
  "testCases": [
    {

```

```

    "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"
      }
    }
  },
  "params": {
    "Region": "us-east-1",
    "UseFIPS": true,
    "UseDualStack": true
  }
},
{
  "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-linux-subscriptions-fips.us-east-1.amazonaws.com"
    }
  },
  "params": {
    "Region": "us-east-1",
    "UseFIPS": true,
    "UseDualStack": false
  }
},
{
  "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-linux-subscriptions.us-east-1.api.aws"
    }
  },
  "params": {
    "Region": "us-east-1",
    "UseFIPS": false,
    "UseDualStack": true
  }
},
{
  "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
    }
  }
}

```

```

    },
    "params": {
      "Region": "us-east-1",
      "UseFIPS": false,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-linux-subscriptions-fips.cn-north-1.api.amazonwebservices.com.cn"
      }
    },
    "params": {
      "Region": "cn-north-1",
      "UseFIPS": true,
      "UseDualStack": true
    }
  },
  {
    "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"
      }
    },
    "params": {
      "Region": "cn-north-1",
      "UseFIPS": true,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
      }
    },
    "params": {
      "Region": "cn-north-1",
      "UseFIPS": false,
      "UseDualStack": true
    }
  },
}

```



```

{
  "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-linux-subscriptions.cn-north-1.amazonaws.com.cn"
    }
  },
  "params": {
    "Region": "cn-north-1",
    "UseFIPS": false,
    "UseDualStack": false
  }
},
{
  "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.api.aws"
    }
  },
  "params": {
    "Region": "us-gov-east-1",
    "UseFIPS": true,
    "UseDualStack": true
  }
},
{
  "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.amazonaws.com"
    }
  },
  "params": {
    "Region": "us-gov-east-1",
    "UseFIPS": true,
    "UseDualStack": false
  }
},
{
  "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-linux-subscriptions.us-gov-east-1.api.aws"
    }
  },

```

```

    "params": {
      "Region": "us-gov-east-1",
      "UseFIPS": false,
      "UseDualStack": true
    }
  },
  {
    "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-linux-subscriptions.us-gov-east-1.amazonaws.com"
      }
    },
    "params": {
      "Region": "us-gov-east-1",
      "UseFIPS": false,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
    "expect": {
      "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
    },
    "params": {
      "Region": "us-iso-east-1",
      "UseFIPS": true,
      "UseDualStack": true
    }
  },
  {
    "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
      }
    },
    "params": {
      "Region": "us-iso-east-1",
      "UseFIPS": true,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack

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```

enabled",
    "expect": {
        "error": "DualStack is enabled but this partition does not support DualStack"
    },
    "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": false,
        "UseDualStack": true
    }
},
{
    "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager-linux-subscriptions.us-iso-east-1.c2s.ic.gov"
        }
    },
    "params": {
        "Region": "us-iso-east-1",
        "UseFIPS":
false,
        "UseDualStack": false
    }
},
{
    "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
    "expect": {
        "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
    },
    "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": true,
        "UseDualStack": true
    }
},
{
    "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
        }
    },
    "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": true,
        "UseDualStack": false
    }
},

```

```

{
  "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
  "expect": {
    "error": "DualStack is enabled but this partition does not support DualStack"
  },
  "params": {
    "Region": "us-isob-east-1",
    "UseFIPS": false,
    "UseDualStack": true
  }
},
{
  "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-linux-subscriptions.us-isob-east-1.sc2s.sgov.gov"
    }
  },
  "params": {
    "Region": "us-isob-east-1",
    "UseFIPS": false,
    "UseDualStack": false
  }
},
{
  "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
  "expect": {
    "endpoint": {
      "url": "https://example.com"
    }
  },
},
{
  "params": {
    "Region": "us-east-1",
    "UseFIPS": false,
    "UseDualStack": false,
    "Endpoint": "https://example.com"
  }
},
{
  "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
  "expect": {
    "endpoint": {
      "url": "https://example.com"
    }
  },
},

```

```

    "params": {
      "UseFIPS": false,
      "UseDualStack": false,
      "Endpoint": "https://example.com"
    }
  },
  {
    "documentation": "For custom endpoint with fips enabled and dualstack disabled",
    "expect": {
      "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
    },
    "params": {
      "Region": "us-east-1",
      "UseFIPS": true,
      "UseDualStack": false,
      "Endpoint": "https://example.com"
    }
  },
  {
    "documentation": "For custom endpoint with fips disabled and dualstack enabled",
    "expect": {
      "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
    },
    "params": {
      "Region": "us-east-1",
      "UseFIPS": false,
      "UseDualStack": true,
      "Endpoint": "https://example.com"
    }
  },
  {
    "documentation": "Missing region",
    "expect": {
      "error": "Invalid Configuration: Missing Region"
    }
  }
],
"version": "1.0"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
  "type": "string",
  "traits": {
    "smithy.api#enum": [
      {

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        "name": "Enabled",
        "value": "Enabled",
        "documentation": "Enabled LinuxSubscriptionsDiscovery"
    },
    {
        "name": "Disabled",
        "value": "Disabled",
        "documentation": "Disabled LinuxSubscriptionsDiscovery"
    }
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings": {
    "type": "structure",
    "members": {
        "SourceRegions": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
            "traits": {
                "smithy.api#documentation": "<p>The Regions in which to discover data for Linux
subscriptions.</p>",
                "smithy.api#required": {}
            }
        },
        "OrganizationIntegration": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
            "traits": {
                "smithy.api#documentation":
"<p>Details if you have enabled resource discovery across your accounts in Organizations.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Lists the settings defined for discovering Linux subscriptions.</p>"
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerError"
        }
    ]
}

```

```

    },
  {
    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
  },
  {
    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
  }
],
"traits": {
  "smithy.api#documentation": "<p>Lists the running Amazon EC2 instances that were discovered with commercial Linux\n  subscriptions.</p>",
  "smithy.api#http": {
    "code": 200,
    "method": "POST",
    "uri": "/subscription/ListLinuxSubscriptionInstances"
  },
  "smithy.api#idempotent": {},
  "smithy.api#paginated": {
    "inputToken": "NextToken",
    "outputToken": "NextToken",
    "pageSize": "MaxResults",
    "items": "Instances"
  }
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest":
{
  "type": "structure",
  "members": {
    "Filters": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
      "traits": {
        "smithy.api#documentation": "<p>An array of structures that you can use to filter the results by your specified criteria. \n  \tFor example, you can specify <code>Region</code> in the <code>Name</code>, with the \n  \t<code>contains</code> operator to list all subscriptions that match a partial string in the \n  \t<code>Value</code>, such as <code>us-west</code>.</p>\n  \t<p>For each filter, you can specify one of the following values for the <code>Name</code> key \n  \tto streamline results:</p>\n  \t<ul>\n  \t<li>\n  \t<p>\n  \t\t<code>AccountID</code>\n  \t\t</p>\n  \t\t</li>\n  \t\t<li>\n  \t\t<p>\n  \t\t\t<code>AmiID</code>\n  \t\t\t</p>\n  \t\t\t</li>\n  \t\t\t<li>\n  \t\t\t<p>\n  \t\t\t\t<code>DualSubscription</code>\n  \t\t\t\t</p>\n  \t\t\t\t</li>\n  \t\t\t\t<li>\n  \t\t\t\t<p>\n  \t\t\t\t\t<code>InstanceID</code>\n  \t\t\t\t\t</p>\n  \t\t\t\t\t</li>\n  \t\t\t\t\t<li>\n  \t\t\t\t\t<p>\n  \t\t\t\t\t\t<code>InstanceType</code>\n  \t\t\t\t\t\t</p>\n  \t\t\t\t\t\t</li>\n  \t\t\t\t\t\t<li>\n  \t\t\t\t\t\t<p>\n  \t\t\t\t\t\t\t<code>ProductCode</code>\n  \t\t\t\t\t\t\t</p>\n  \t\t\t\t\t\t\t</li>\n  \t\t\t\t\t\t\t<li>\n  \t\t\t\t\t\t\t<p>\n  \t\t\t\t\t\t\t\t<code>Region</code>\n  \t\t\t\t\t\t\t\t</p>\n  \t\t\t\t\t\t\t\t</li>\n  \t\t\t\t\t\t\t\t<li>\n  \t\t\t\t\t\t\t\t<p>\n  \t\t\t\t\t\t\t\t\t<code>Status</code>\n  \t\t\t\t\t\t\t\t\t</p>\n  \t\t\t\t\t\t\t\t\t</li>\n  \t\t\t\t\t\t\t\t\t<li>\n  \t\t\t\t\t\t\t\t\t<p>\n  \t\t\t\t\t\t\t\t\t\t<code>UsageOperation</code>\n  \t\t\t\t\t\t\t\t\t\t</p>\n  \t\t\t\t\t\t\t\t\t\t</li>\n  \t\t\t\t\t\t\t\t\t</ul>\n  \t\t\t\t\t\t\t\t<p>For each filter, you can use one of the following <code>Operator</code>"
      }
    }
  }
}

```

```

values to \n \t\define the behavior of the filter:</p>\n      <ul>\n          <li>\n              <p>\n
<code>contains</code>\n          </p>\n          </li>\n          <li>\n              <p>\n
<code>equals</code>\n          </p>\n          </li>\n          <li>\n              <p>\n
<code>Notequal</code>\n          </p>\n          </li>\n      </ul>"
    }
  },
  "MaxResults": {
    "target": "com.amazonaws.licenseanagerlinuxsubscriptions#BoxInteger",
    "traits": {
      "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
    }
  },
  "NextToken": {
    "target": "smithy.api#String",
    "traits": {
      "smithy.api#documentation": "<p>A token to specify where to
start paginating. This \n\tis the nextToken from a previously truncated response.</p>",
      "smithy.api#length": {
        "min": 1,
        "max": 16384
      }
    }
  },
  "traits": {
    "smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if
parameters in request increases."
  }
},
"com.amazonaws.licenseanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
  "type": "structure",
  "members": {
    "Instances": {
      "target": "com.amazonaws.licenseanagerlinuxsubscriptions#InstanceList",
      "traits": {
        "smithy.api#documentation": "<p>An array that contains instance objects.</p>"
      }
    },
    "NextToken": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional objects.</p>"
      }
    }
  }
}

```



```

    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerError"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Lists the Linux subscriptions that have been discovered. If you have linked your\n  organization, the returned results will include data aggregated across your accounts in\n  Organizations.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/subscription/ListLinuxSubscriptions"
        },
        "smithy.api#idempotent": {},
        "smithy.api#paginated": {
          "inputToken": "NextToken",
          "outputToken": "NextToken",
          "pageSize": "MaxResults"
        }
      }
    },
    "items": "Subscriptions"
  }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
  "type": "structure",
  "members": {
    "Filters": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
      "traits": {
        "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those that match one or\n  more sets of key-value pairs that you specify. For example, you can filter by the name of\n  <code>Subscription</code> with an optional operator to see subscriptions that match,\n  partially match, or don't

```

```

match a certain subscription's name.</p>\n      <p>The valid names for this filter are:</p>\n      <ul>\n
<li>\n          <p>\n              <code>Subscription</code>\n          </p>\n      </li>\n      </ul>\n
<p>The
valid Operators for this filter are:</p>\n      <ul>\n          <li>\n              <p>\n                  <code>contains</code>\n              </p>\n          </li>\n          <li>\n              <p>\n                  <code>equals</code>\n              </p>\n          </li>\n          <li>\n              <p>\n                  <code>NotEqual</code>\n              </p>\n          </li>\n      </ul>"
    }
  },
  "MaxResults": {
    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
    "traits": {
      "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
    }
  },
  "NextToken": {
    "target": "smithy.api#String",
    "traits": {
      "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis
the nextToken from a previously truncated response.</p>",
      "smithy.api#length": {
        "min": 1,
        "max": 16384
      }
    }
  },
  "traits": {
    "smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if
parameters in request increases."
  }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
  "type": "structure",
  "members": {
    "Subscriptions": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
      "traits": {
        "smithy.api#documentation": "<p>An array that contains subscription objects.</p>"
      }
    },
    "NextToken": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional objects.</p>"
      }
    }
  }
}

```

```

    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders": {
    "type": "operation",
    "input": {
      "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest"
    },
    "output": {
      "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerError"
      },
      {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
      },
      {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
      }
    ],
    "traits": {
      "smithy.api#documentation": "<p>List Bring Your Own License (BYOL) subscription registration
resources for your account.</p>",
      "smithy.api#http": {
        "code": 200,
        "method": "POST",
        "uri": "/subscription/ListRegisteredSubscriptionProviders"
      },
      "smithy.api#idempotent": {},
      "smithy.api#paginated": {
        "inputToken": "NextToken",
        "outputToken": "NextToken",
        "pageSize": "MaxResults",
        "items": "RegisteredSubscriptionProviders"
      }
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest": {
    "type": "structure",
    "members": {
      "SubscriptionProviderSources": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList",

```





```

    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse": {
  "type": "structure",
  "members": {
    "tags": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
      "traits": {
        "smithy.api#documentation": "<p>The metadata tags for the requested resource.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
  "type": "string",
  "traits": {
    "smithy.api#enum": [
      {
        "name": "EQUAL",
        "value": "Equal",
        "documentation": "Equal operator"
      },
      {
        "name": "NOT_EQUAL",
        "value": "NotEqual",
        "documentation": "Not equal operator"
      },
      {
        "name": "CONTAINS",
        "value": "Contains",
        "documentation": "Contains operator"
      }
    ],
    "smithy.api#length": {
      "min": 1,
      "max": 20
    }
  }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration":
{
  "type": "string",
  "traits": {
    "smithy.api#enum": [

```

```

    {
      "name": "Enabled",
      "value": "Enabled",
      "documentation": "Enabled OrganizationIntegration"
    },
    {
      "name": "Disabled",
      "value": "Disabled",
      "documentation": "Disabled OrganizationIntegration"
    }
  ]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
  "type": "list",
  "member": {
    "target": "smithy.api#String"
  }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerError"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Register the supported third-party subscription provider for your Bring Your Own License (BYOL) subscription.</p>",
    "smithy.api#http": {
      "code": 200,
      "method": "POST",
      "uri": "/subscription/RegisterSubscriptionProvider"
    }
  },
  "smithy.api#idempotent": {}
}

```





```

    }
  },
  "SubscriptionProviderStatus": {
    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
    "traits": {
      "smithy.api#documentation": "<p>Indicates the status of the registration action for the Linux
subscription provider \n\t\t\tthat you requested.</p>"
    }
  }
},
"traits": {
  "smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider":
{
  "type": "structure",
  "members": {
    "SubscriptionProviderArn": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
      "traits": {
        "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Linux subscription
provider resource that you registered.</p>"
      }
    },
    "SubscriptionProviderSource": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
      "traits": {
        "smithy.api#documentation": "<p>A supported third-party Linux subscription provider. License
Manager currently supports \n\t\t\tRed Hat subscriptions.</p>"
      }
    },
    "SecretArn": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
      "traits": {
        "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Secrets Manager secret
that stores your registered Linux subscription provider \n\t\t\taccess token. For RHEL account subscriptions, this is
the offline token.</p>"
      }
    },
    "SubscriptionProviderStatus": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
      "traits": {
        "smithy.api#documentation": "<p>Indicates the status of your registered Linux subscription provider
access token \n\t\t\tfrom the last time License Manager retrieved subscription data. For RHEL account subscriptions,
\n\t\t\tthis is the status of the offline token.</p>"
      }
    }
  },

```

```

"SubscriptionProviderStatusMessage": {
  "target": "smithy.api#String",
  "traits":
{
  "smithy.api#documentation": "<p>A detailed message that's associated with your BYOL subscription
\n\t\t\tprovider token status.</p>"
  }
},
"LastSuccessfulDataRetrievalTime": {
  "target": "smithy.api#String",
  "traits": {
    "smithy.api#documentation": "<p>The timestamp from the last time that License Manager accessed
third-party subscription data \n\t\t\tfor your account from your registered Linux subscription provider.</p>"
  }
},
"traits": {
  "smithy.api#documentation": "<p>A third-party provider for operating system (OS) platform software and
license \n\t\t\tsubscriptions, such as Red Hat. When you register a third-party Linux subscription \n\t\t\tprovider,
License Manager can get subscription data from the registered provider.</p>"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList":
{
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider"
  }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException": {
  "type": "structure",
  "members": {
    "message": {
      "target": "smithy.api#String"
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Unable to find the requested Amazon Web Services resource.</p>",
    "smithy.api#error": "client"
  }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn": {
  "type": "string",
  "traits": {
    "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-
\\.]{0,63}:secret:[^/]{1,1023}$"
  }
}

```

```

}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
  "type": "string",
  "traits": {
    "smithy.api#enum": [
      {
        "name": "InProgress",
        "value": "InProgress",
        "documentation": "InProgress status"
      },
      {
        "name": "Completed",
        "value": "Completed",
        "documentation": "Completed status"
      },
      {
        "name": "Successful",
        "value": "Successful",
        "documentation": "Successful status"
      },
      {
        "name": "Failed",
        "value": "Failed",
        "documentation": "Failed status"
      }
    ]
  }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
  "type": "list",
  "member": {
    "target": "smithy.api#String",
    "traits": {
      "smithy.api#length": {
        "min": 1,
        "max": 100
      }
    }
  },
  "traits": {
    "smithy.api#length": {
      "min": 1,
      "max": 100
    },
    "smithy.api#uniqueItems": {}
  }
}

```

```

    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
      "type": "map",
      "key": {
        "target": "smithy.api#String"
      },
      "value": {
        "target": "smithy.api#String"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
      "type": "structure",
      "members": {
        "Name": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The name of the subscription.</p>"
          }
        },
        "Type": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The type of subscription. The type can be subscription-included with Amazon EC2, Bring Your Own\n  Subscription model (BYOS), or from the Amazon Web Services Marketplace. Certain subscriptions may use licensing from the\n  Amazon Web Services Marketplace as well as OS licensing from Amazon EC2 or BYOS.</p>"
          }
        },
        "InstanceCount": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
          "traits": {
            "smithy.api#documentation": "<p>The total amount of running instances using this subscription.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>An object which details a discovered Linux subscription.</p>"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn": {

```

```

    "type": "string",
    "traits": {
      "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,510}/[a-z0-9-\\.]{1,510}$"
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource": {
    "type": "string",
    "traits": {
      "smithy.api#enum": [
        {
          "name": "RedHat",
          "value": "RedHat",
          "documentation": "RedHat subscription provider namespace"
        }
      ]
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList": {
    "type": "list",
    "member": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource"
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus": {
    "type": "string",
    "traits": {
      "smithy.api#enum": [
        {
          "name": "ACTIVE",
          "value": "ACTIVE",
          "documentation": "ACTIVE status"
        },
        {
          "name": "INVALID",
          "value": "INVALID",
          "documentation": "INVALID status"
        },
        {
          "name": "PENDING",
          "value": "PENDING",
          "documentation": "PENDING status"
        }
      ]
    }
  },
  },

```

```

"com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList": {
  "type": "list",
  "member": {
    "target": "smithy.api#String"
  },
  "traits": {
    "smithy.api#length": {
      "min": 0,
      "max": 50
    },
    "smithy.api#sensitive": {}
  }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagResource": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerError"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Add metadata tags to the specified Amazon Web Services resource.</p>",
    "smithy.api#http": {
      "method": "PUT",
      "uri": "/tags/{resourceArn}"
    },
    "smithy.api#idempotent": {}
  }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest": {
  "type": "structure",
  "members":
{
  "resourceArn": {
    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",

```



```

        "target": "smithy.api#String"
    }
},
"traits": {
    "smithy.api#documentation":
"<p>The request was denied due to request throttling.</p>",
    "smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerErrorException"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Remove one or more metadata tag from the specified Amazon Web
Services resource.</p>",
        "smithy.api#http": {
            "method": "DELETE",
            "uri": "/tags/{resourceArn}"
        },
        "smithy.api#idempotent": {}
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest": {
    "type": "structure",
    "members": {
        "resourceArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to remove the metadata tags from.</p>",
                "smithy.api#httpLabel": {},
                "smithy.api#required": {}
            }
        }
    },
    "tagKeys": {

```





```

    "smithy.api#idempotent": {}
  }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest": {
  "type": "structure",
  "members": {
    "LinuxSubscriptionsDiscovery": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
      "traits": {
        "smithy.api#documentation": "<p>Describes if the discovery of Linux subscriptions is enabled.</p>",
        "smithy.api#required": {}
      }
    },
    "LinuxSubscriptionsDiscoverySettings": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
      "traits": {
        "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The settings include if Organizations\n    integration has been enabled, and which Regions data will be aggregated from.</p>",
        "smithy.api#required": {}
      }
    },
    "AllowUpdate": {
      "target":
"smithy.api#Boolean",
      "traits": {
        "smithy.api#documentation": "<p>Describes if updates are allowed to the service settings for Linux subscriptions. If you\n    allow updates, you can aggregate Linux subscription data in more than one home Region.</p>"
      }
    }
  }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
  "type": "structure",
  "members": {
    "LinuxSubscriptionsDiscovery": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
      "traits": {
        "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
      }
    },
    "LinuxSubscriptionsDiscoverySettings": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
      "traits": {
        "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The settings include if Organizations\n    integration has been enabled, and which Regions data will be aggregated from.</p>"
      }
    }
  }
}

```



```

"github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
"github.com/aws/smithy-go/middleware"
smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
    if params == nil {
        params = &DeleteLicenseInput{}
    }

    result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
    if err != nil {
        return nil, err
    }

    out := result.(*DeleteLicenseOutput)
    out.ResultMetadata = metadata
    return out, nil
}

type DeleteLicenseInput struct {

    // Amazon Resource Name (ARN) of the license.
    //
    // This member is required.
    LicenseArn *string

    // Current version of the license.
    //
    // This member is required.
    SourceVersion
    *string

    noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

    // Date when the license is deleted.
    DeletionDate *string

    // License status.
    Status types.LicenseDeletionStatus

    // Metadata pertaining to the operation's result.

```

ResultMetadata middleware.Metadata

```
noSmithyDocumentSerde
}
```

```
func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
    if err := stack.Serialize.Add(&setOperationInputMiddleware{ }, middleware.After); err != nil {
        return err
    }
    err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{ }, middleware.After)
    if err != nil {
        return err
    }
    err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{ }, middleware.After)
    if err != nil {
        return err
    }
    if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
        return fmt.Errorf("add protocol finalizers: %v", err)
    }
}
```

```
if err = addLegacyEndpointContextSetter(stack, options); err !=
nil {
    return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
    return err
}
if err = addClientRequestID(stack); err != nil {
    return err
}
if err = addComputeContentLength(stack); err != nil {
    return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
    return err
}
if err = addComputePayloadSHA256(stack); err != nil {
    return err
}
if err = addRetry(stack, options); err != nil {
    return err
}
if err = addRawResponseToMetadata(stack); err != nil {
    return err
}
if err = addRecordResponseTiming(stack); err != nil {
    return err
}
```

```

}
if err = addClientUserAgent(stack, options); err != nil {
    return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
    return err
}
if err = addTimeOffsetBuild(stack, c); err != nil
{
    return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
    return err
}
if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
    return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
    return err
}
if err = addRecursionDetection(stack); err != nil {
    return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
    return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
    return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
    return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
    return err
}
return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
return &awsmiddleware.RegisterServiceMetadata{
    Region:    region,

```

```
ServiceID: ServiceID,  
OperationName: "DeleteLicense",  
}  
}
```

DeleteLicense

Initialize stack step

RegisterServiceMetadata

legacyEndpointContextSetter

SetLogger

OperationInputValidation

Serialize stack step

setOperationInput

ResolveEndpoint

OperationSerializer

Build stack step

ClientRequestID

ComputeContentLength

UserAgent

AddTimeOffsetMiddleware

RecursionDetection

Finalize stack step

ResolveAuthScheme

GetIdentity

ResolveEndpointV2

disableHTTPS

ComputePayloadHash

Retry

RetryMetricsHeader

setLegacyContextSigningOptions

Signing

Deserialize stack step

AddRawResponseToMetadata

ErrorCloseResponseBody

CloseResponseBody

ResponseErrorWrapper

RequestIDRetriever

OperationDeserializer

AddTimeOffsetMiddleware

RecordResponseTiming

RequestResponseLogger

GetLicense

Initialize stack step

RegisterServiceMetadata

legacyEndpointContextSetter

SetLogger

OperationInputValidation

Serialize stack step

setOperationInput

```

ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
Retry
RetryMetricsHeader
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

```

```
package licensemanager
```

```

import (
    "context"
    "fmt"
    awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
    "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
    "github.com/aws/smithy-go/middleware"
    smithyhttp "github.com/aws/smithy-go/transport/http"
)

```

```
// Checks out the specified license for offline use.
```

```

func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
    if params == nil {
        params = &CheckoutBorrowLicenseInput{}
    }
}

```



```

result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
if err != nil {
    return nil, err
}

out := result.(*CheckoutBorrowLicenseOutput)
out.ResultMetadata = metadata
return out, nil
}

type CheckoutBorrowLicenseInput struct {

    // Unique, case-sensitive identifier that you provide to ensure the idempotency of
    //
    // the request.
    //
    // This member is required.
    ClientToken *string

    // Digital signature method. The possible value is JSON Web Signature (JWS)
    // algorithm PS384. For more information, see [RFC 7518 Digital Signature with RSASSA-PSS].
    //
    // [RFC 7518 Digital Signature with RSASSA-PSS]: https://tools.ietf.org/html/rfc7518#section-3.5
    //
    // This member is required.
    DigitalSignatureMethod types.DigitalSignatureMethod

    // License entitlements. Partial checkouts are not supported.
    //
    // This member is required.
    Entitlements []types.EntitlementData

    // Amazon Resource Name (ARN) of the license. The license must use the borrow
    // consumption configuration.
    //
    // This member is required.
    LicenseArn *string

    // Information about constraints.
    CheckoutMetadata []types.Metadata

    // Node ID.
    NodeId *string

    noSmithyDocumentSerde
}

```

```

type CheckoutBorrowLicenseOutput struct {

    // Information about constraints.
    CheckoutMetadata []types.Metadata

    // Allowed license entitlements.
    EntitlementsAllowed
    []types.EntitlementData

    // Date and time at which the license checkout expires.
    Expiration *string

    // Date and time at which the license checkout is issued.
    IssuedAt *string

    // Amazon Resource Name (ARN) of the license.
    LicenseArn *string

    // License consumption token.
    LicenseConsumptionToken *string

    // Node ID.
    NodeId *string

    // Signed token.
    SignedToken *string

    // Metadata pertaining to the operation's result.
    ResultMetadata middleware.Metadata

    noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
    if err := stack.Serialize.Add(&setOperationInputMiddleware{ }, middleware.After); err != nil {
        return err
    }
    err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{ }, middleware.After)
    if err != nil {
        return err
    }
    err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{ }, middleware.After)
    if err != nil {
        return
    }
    err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {

```

```

return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addLegacyEndpointContextSetter(stack, options); err != nil {
return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
return err
}
if err = addClientRequestID(stack); err != nil {
return err
}
if err = addComputeContentLength(stack); err != nil {
return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
return err
}
if err = addComputePayloadSHA256(stack); err != nil {
return err
}
if err = addRetry(stack, options); err != nil {
return err
}
if err = addRawResponseToMetadata(stack); err != nil {
return err
}
if err = addRecordResponseTiming(stack); err != nil {
return err
}
if err = addClientUserAgent(stack, options); err != nil {
return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
return
err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
return err
}

```

```

}
if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
    return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
    return err
}
if err = addRecursionDetection(stack); err != nil {
    return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
    return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
    return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
    return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
    return err
}
return nil
}

```

```

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region
string) *awsmiddleware.RegisterServiceMetadata {
return &awsmiddleware.RegisterServiceMetadata{
    Region:    region,
    ServiceID: ServiceID,
    OperationName: "CheckoutBorrowLicense",
}
}

```

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// Code generated by smithy-go-codegen DO NOT EDIT.

```
package licensemanager
```

```
import (  
    "context"  
    "fmt"  
    awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"  
    "github.com/aws/smithy-go/middleware"  
    smithyhttp "github.com/aws/smithy-go/transport/http"  
)
```

```
// Checks in the specified license. Check in a license when it is no longer in use.
```

```
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
```

```
(*CheckInLicenseOutput, error) {
```

```
    if params == nil {
```

```
        params = &CheckInLicenseInput{ }
```

```
    }
```

```
    result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
```

```
    c.addOperationCheckInLicenseMiddlewares)
```

```
    if err != nil {
```

```
        return nil, err
```

```
    }
```

```
    out := result.(*CheckInLicenseOutput)
```

```
    out.ResultMetadata = metadata
```

```
    return out, nil
```

```
}
```

```
type CheckInLicenseInput struct {
```

```
    // License consumption token.
```

```
    //
```

```

// This member is required.
LicenseConsumptionToken *string

// License beneficiary.
Beneficiary *string

noSmithyDocumentSerde
}

type
CheckInLicenseOutput struct {
// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
if err := stack.Serialize.Add(&setOperationInputMiddleware{ }, middleware.After); err != nil {
return err
}
err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{ }, middleware.After)
if err != nil {
return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{ }, middleware.After)
if err != nil {
return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addLegacyEndpointContextSetter(stack, options); err != nil {
return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
return err
}
if err = addClientRequestID(stack); err != nil {
return err
}
if
err = addComputeContentLength(stack); err != nil {
return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
return err
}

```

```

}
if err = addComputePayloadSHA256(stack); err != nil {
    return err
}
if err = addRetry(stack, options); err != nil {
    return err
}
if err = addRawResponseToMetadata(stack); err != nil {
    return err
}
if err = addRecordResponseTiming(stack); err != nil {
    return err
}
if err = addClientUserAgent(stack, options); err != nil {
    return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
    return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
    return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
    return err
}
if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil
{
    return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
    return err
}
if err = addRecursionDetection(stack); err != nil {
    return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
    return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
    return err
}
}

```

```

if err = addRequestResponseLogging(stack, options); err != nil {
    return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
    return err
}
return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
return &awsmiddleware.RegisterServiceMetadata{
    Region:    region,
    ServiceID: ServiceID,
    OperationName: "CheckInLicense",
}
}

```

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// Code generated by smithy-go-codegen DO NOT EDIT.

```
package licensemanager
```

```
import (  
    "context"  
    "fmt"  
    awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"  
    "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"  
    "github.com/aws/smithy-go/middleware"  
    smithyhttp "github.com/aws/smithy-go/transport/http"  
)
```

```

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
    if params == nil {
        params = &ListLicensesInput{}
    }

    result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
    if err != nil {
        return nil, err
    }

    out := result.(*ListLicensesOutput)
    out.ResultMetadata = metadata
    return out, nil
}

```

```

type ListLicensesInput struct {

```

```

    // Filters to scope the results. The following filters are supported:

```

```

    //

```

```

    // - Beneficiary

```

```

    //

```

```

    // - ProductSKU

```

```

    //

```

```

    // - Fingerprint

```

```

    //

```

```

    // - Status

```

```

    Filters

```

```

    []types.Filter

```

```

    // Amazon Resource Names (ARNs) of the licenses.

```

```

    LicenseArns []string

```

```

    // Maximum number of results to return in a single call.

```

```

    MaxResults *int32

```

```

    // Token for the next set of results.

```

```

    NextToken *string

```

```

    noSmithyDocumentSerde

```

```

}

```

```

type ListLicensesOutput struct {

```

```

    // License details.

```

```

    Licenses []types.License

```

```

// Token for the next set of results.
NextToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
    if err := stack.Serialize.Add(&setOperationInputMiddleware{ }, middleware.After); err != nil {
        return err
    }
    err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{ }, middleware.After)
    if err != nil {
        return err
    }
    err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{ }, middleware.After)
    if err != nil {
        return err
    }
    if err := addProtocolFinalizerMiddlewares(stack,
        options, "ListLicenses"); err != nil {
        return fmt.Errorf("add protocol finalizers: %v", err)
    }

    if err = addLegacyEndpointContextSetter(stack, options); err != nil {
        return err
    }
    if err = addSetLoggerMiddleware(stack, options); err != nil {
        return err
    }
    if err = addClientRequestID(stack); err != nil {
        return err
    }
    if err = addComputeContentLength(stack); err != nil {
        return err
    }
    if err = addResolveEndpointMiddleware(stack, options); err != nil {
        return err
    }
    if err = addComputePayloadSHA256(stack); err != nil {
        return err
    }
    if err = addRetry(stack, options); err != nil {
        return err
    }
}

```

```

if err = addRawResponseToMetadata(stack); err != nil {
    return err
}
if err = addRecordResponseTiming(stack); err != nil {
    return err
}
if err = addClientUserAgent(stack, options); err != nil {
    return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack);
err != nil {
    return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
    return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
    return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
    return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
    return err
}
if err = addRecursionDetection(stack); err != nil {
    return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
    return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
    return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
    return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
    return err
}
return nil
}

```

```

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {

```

```

return &awsmiddleware.RegisterServiceMetadata{
    Region:    region,
    ServiceID:
        ServiceID,
    OperationName: "ListLicenses",
}
}
}
CheckInLicense
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
Retry
RetryMetricsHeader
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
{
    "smithy": "2.0",
    "shapes": {
        "com.amazonaws.licenseanagerusersubscriptions#AccessDeniedException": {
            "type": "structure",

```



```

"members": {
  "message": {
    "target": "smithy.api#String"
  }
},
"traits": {
  "smithy.api#documentation": "<p>You don't have sufficient access to perform this action.</p>",
  "smithy.api#error": "client"
}
},
"com.amazonaws.licenseanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
  "type": "structure",
  "members": {
    "DirectoryId": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The directory ID for an Active Directory identity provider.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#documentation":
"<p>Details about an Active Directory identity provider.</p>"
  }
},
"com.amazonaws.licenseanagerusersubscriptions#AssociateUser": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licenseanagerusersubscriptions#AssociateUserRequest"
  },
  "output": {
    "target": "com.amazonaws.licenseanagerusersubscriptions#AssociateUserResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ConflictException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#InternalServerErrorException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ResourceNotFoundException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ServiceQuotaExceededException"
    }
  ]
}

```

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    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Associates the user to an EC2 instance to utilize user-based
subscriptions.</p>\n    <note>\n    <p>Your estimated bill for charges on the number of users and related
costs will take 48\n    hours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing
status) in Amazon Web Services Billing. For more information, see <a
href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n
monthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n    </note>",
    "smithy.api#http": {
      "code": 200,
      "method": "POST",
      "uri": "/user/AssociateUser"
    },
    "smithy.api#idempotent": {}
  }
},
"com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {
  "type": "structure",
  "members": {
    "Username": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
        "smithy.api#required": {}
      }
    },
    "InstanceId": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The ID of the
EC2 instance, which provides user-based subscriptions.</p>",
        "smithy.api#required": {}
      }
    },
    "IdentityProvider": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
      "traits": {
        "smithy.api#documentation": "<p>The identity provider of the user.</p>",
        "smithy.api#required": {}
      }
    }
  },
}

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    "Domain": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The domain name of the user.</p>"
      }
    }
  },
  "com.amazonaws.licenseanagerusersubscriptions#AssociateUserResponse": {
    "type": "structure",
    "members": {
      "InstanceUserSummary": {
        "target": "com.amazonaws.licenseanagerusersubscriptions#InstanceUserSummary",
        "traits": {
          "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
          "smithy.api#required": {}
        }
      }
    }
  },
  "com.amazonaws.licenseanagerusersubscriptions#BoxInteger": {
    "type": "integer"
  },
  "com.amazonaws.licenseanagerusersubscriptions#ConflictException": {
    "type": "structure",
    "members": {
      "message": {
        "target": "smithy.api#String"
      }
    },
    "traits": {
      "smithy.api#documentation": "<p>The request couldn't be completed because it conflicted with the current state of the\n  resource.</p>",
      "smithy.api#error": "server"
    }
  },
  "com.amazonaws.licenseanagerusersubscriptions#DeregisterIdentityProvider":
  {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#DeregisterIdentityProviderRequest"
    },
    "output": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#DeregisterIdentityProviderResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licenseanagerusersubscriptions#AccessDeniedException"
      }
    ]
  }
}

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    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerErrorException"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Deregisters the identity provider from providing user-based
subscriptions.</p>",
    "smithy.api#http": {
      "code": 200,
      "method": "POST",
      "uri": "/identity-provider/DeregisterIdentityProvider"
    },
    "smithy.api#idempotent": {}
  }
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest": {
  "type": "structure",
  "members": {
    "IdentityProvider": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
      "traits": {
        "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
        "smithy.api#required": {}
      }
    },
    "Product": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
        "smithy.api#required": {}
      }
    }
  }
}

```

```

    }
  },
  "com.amazonaws.licenseanagerusersubscriptions#DeregisterIdentityProviderResponse": {
    "type": "structure",
    "members": {
      "IdentityProviderSummary": {
        "target": "com.amazonaws.licenseanagerusersubscriptions#IdentityProviderSummary",
        "traits": {
          "smithy.api#documentation":
"<p>Metadata that describes the results of an identity provider operation.</p>",
          "smithy.api#required": {}
        }
      }
    }
  },
  "com.amazonaws.licenseanagerusersubscriptions#DisassociateUser": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#DisassociateUserRequest"
    },
    "output": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#DisassociateUserResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licenseanagerusersubscriptions#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licenseanagerusersubscriptions#ConflictException"
      },
      {
        "target": "com.amazonaws.licenseanagerusersubscriptions#InternalServerErrorException"
      },
      {
        "target": "com.amazonaws.licenseanagerusersubscriptions#ResourceNotFoundException"
      },
      {
        "target": "com.amazonaws.licenseanagerusersubscriptions#ServiceQuotaExceededException"
      },
      {
        "target": "com.amazonaws.licenseanagerusersubscriptions#ThrottlingException"
      },
      {
        "target": "com.amazonaws.licenseanagerusersubscriptions#ValidationException"
      }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Disassociates the user from an EC2 instance providing user-based

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subscriptions.</p>",
  "smithy.api#http": {
    "code": 200,
    "method": "POST",
    "uri": "/user/DisassociateUser"
  },
  "smithy.api#idempotent": {}
}

},
"com.amazonaws.licenseanagerusersubscriptions#DisassociateUserRequest": {
  "type": "structure",
  "members": {
    "Username": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
        "smithy.api#required": {}
      }
    },
    "InstanceId": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
        "smithy.api#required": {}
      }
    },
    "IdentityProvider": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#IdentityProvider",
      "traits": {
        "smithy.api#documentation":
"<p>An object that specifies details for the identity provider.</p>",
        "smithy.api#required": {}
      }
    },
    "Domain": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The domain name of the user.</p>"
      }
    }
  }
},
"com.amazonaws.licenseanagerusersubscriptions#DisassociateUserResponse": {
  "type": "structure",
  "members": {
    "InstanceUserSummary": {

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    "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
    "traits": {
      "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
      "smithy.api#required": {}
    }
  }
},
"com.amazonaws.licensemanagerusersubscriptions#Filter": {
  "type": "structure",
  "members": {
    "Attribute": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The name of an attribute to use as a filter.</p>"
      }
    },
    "Operation": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The type of search (For example, eq, geq, leq)</p>"
      }
    },
    "Value": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>Value of the filter.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>A filter name and value pair that is used
to return more specific results from a describe\n    operation. Filters can be used to match a set of resources by
specific criteria, such as tags,\n    attributes, or IDs.</p>"
  }
},
"com.amazonaws.licensemanagerusersubscriptions#FilterList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanagerusersubscriptions#Filter"
  }
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProvider": {
  "type": "union",
  "members": {
    "ActiveDirectoryIdentityProvider": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider",

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        "traits": {
            "smithy.api#documentation": "<p>An object that details an Active Directory identity provider.</p>"
        }
    },
    "traits": {
        "smithy.api#documentation":
"<p>Details about an identity provider.</p>"
    }
},
"com.amazonaws.licenseanagerusersubscriptions#IdentityProviderSummary": {
    "type": "structure",
    "members": {
        "IdentityProvider": {
            "target": "com.amazonaws.licenseanagerusersubscriptions#IdentityProvider",
            "traits": {
                "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                "smithy.api#required": {}
            }
        },
        "Settings": {
            "target": "com.amazonaws.licenseanagerusersubscriptions#Settings",
            "traits": {
                "smithy.api#documentation": "<p>An object that details the registered identity providers product
related configuration\n    settings such as the subnets to provision VPC endpoints.</p>",
                "smithy.api#required":
{}
            }
        },
        "Product": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                "smithy.api#required": {}
            }
        },
        "Status": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The status of an identity provider.</p>",
                "smithy.api#required": {}
            }
        },
        "FailureMessage": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The failure message associated with an identity provider.</p>"
            }
        }
    }
}

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```

    }
  },
  "traits": {
    "smithy.api#documentation":
"<p>Describes an identity provider.</p>"
  }
},
"com.amazonaws.licenseanagerusersubscriptions#IdentityProviderSummaryList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licenseanagerusersubscriptions#IdentityProviderSummary"
  }
},
"com.amazonaws.licenseanagerusersubscriptions#InstanceSummary": {
  "type": "structure",
  "members": {
    "InstanceId": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
        "smithy.api#required": {}
      }
    },
    "Status": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The status
of an EC2 instance resource.</p>",
        "smithy.api#required": {}
      }
    },
    "Products": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#StringList",
      "traits": {
        "smithy.api#documentation": "<p>A list of provided user-based subscription products.</p>",
        "smithy.api#required": {}
      }
    },
    "LastStatusCheckDate": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The date of the last status check.</p>"
      }
    },
    "StatusMessage": {
      "target": "smithy.api#String",
      "traits": {

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    "smithy.api#documentation": "<p>The status message for an EC2 instance.</p>"
  }
}
},
"traits": {
  "smithy.api#documentation": "<p>Describes an EC2 instance providing user-based subscriptions.</p>"
}
},
"com.amazonaws.licenseanagerusersubscriptions#InstanceSummaryList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licenseanagerusersubscriptions#InstanceSummary"
  }
},
"com.amazonaws.licenseanagerusersubscriptions#InstanceUserSummary": {
  "type": "structure",
  "members": {
    "Username": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
        "smithy.api#required": {}
      }
    },
    "InstanceId": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
        "smithy.api#required": {}
      }
    },
    "IdentityProvider": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#IdentityProvider",
      "traits": {
        "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
        "smithy.api#required": {}
      }
    },
    "Status": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The status of a user associated with an EC2 instance.</p>",
        "smithy.api#required": {}
      }
    }
  },
}

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    "StatusMessage": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The status message for users of an EC2 instance.</p>"
      }
    },
    "Domain": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The domain name of the user.</p>"
      }
    },
    "AssociationDate": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The date a user was associated with an EC2 instance.</p>"
      }
    },
    "DisassociationDate": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The date a user was disassociated from an EC2 instance.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Describes users of an EC2 instance providing user-based
subscriptions.</p>"
  }
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
  }
},
"com.amazonaws.licensemanagerusersubscriptions#InternalServerError": {
  "type": "structure",
  "members": {
    "message": {
      "target": "smithy.api#String"
    }
  }
},
"traits": {
  "smithy.api#documentation": "<p>An exception occurred with the service.</p>",
  "smithy.api#error": "server"
}

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    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {
      "type": "service",

      "version": "2018-05-10",
      "operations": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUser"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstances"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations"
        }
      ],
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
      }
    }
  ],
  "traits": {
    "aws.api#service": {
      "sdkId": "License Manager User Subscriptions",
      "arnNamespace": "license-manager-user-subscriptions",
      "cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
    },
    "aws.auth#sigv4": {

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    "name": "license-manager-user-subscriptions"
  },
  "aws.protocols#restJson1": {},
  "smithy.api#cors": {
    "additionalAllowedHeaders": [
      "*",
      "content-type",
      "x-amz-content-sha256",
      "x-amz-user-agent",
      "x-amzn-platform-id",
      "x-amzn-trace-id",
      "content-length",
      "x-api-key",
      "authorization",
      "x-amz-date",
      "x-amz-security-token",
      "Access-Control-Allow-Headers",
      "Access-Control-Allow-Methods",
      "Access-Control-Allow-Origin"
    ],
    "additionalExposedHeaders": [
      "x-amzn-errortype",
      "x-amzn-requestid",
      "x-amzn-trace-id"
    ]
  }
],
  "smithy.api#documentation": "<p>With License Manager, you can create user-based subscriptions to utilize licensed software with a per user subscription fee on Amazon EC2 instances.</p>",
  "smithy.api#title": "AWS License Manager User Subscriptions",
  "smithy.rules#endpointRuleSet": {
    "version": "1.0",
    "parameters": {
      "Region": {
        "builtIn": "AWS::Region",
        "required": false,
        "documentation": "The AWS region used to dispatch the request.",
        "type": "String"
      },
      "UseDualStack": {
        "builtIn": "AWS::UseDualStack",
        "required": true,
        "default": false,
        "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
        "type": "Boolean"
      },
      "UseFIPS": {

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    "builtIn": "AWS::UseFIPS",
    "required": true,
    "default": false,
    "documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the
configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
    "type": "Boolean"
  },
  "Endpoint": {
    "builtIn": "SDK::Endpoint",
    "required": false,
    "documentation": "Override the endpoint used to send this request",
    "type": "String"
  }
},
"rules": [
  {
    "conditions": [
      {
        "fn": "isSet",
        "argv": [
          {
            "ref": "Endpoint"
          }
        ]
      }
    ]
  }
],
"type": "tree",
"rules": [
  {
    "conditions": [
      {
        "fn": "booleanEquals",
        "argv": [
          {
            "ref": "UseFIPS"
          },
          true
        ]
      }
    ]
  }
],
"error": "Invalid Configuration: FIPS and custom endpoint are not supported",
"type": "error"
},
{
  "conditions": [
    {

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        "fn": "booleanEquals",
        "argv": [
            {
                "ref": "UseDualStack"
            },
            true
        ]
    }
],

"error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
"type": "error"
},
{
    "conditions": [],
    "endpoint": {
        "url": {
            "ref": "Endpoint"
        },
        "properties": {},
        "headers": {}
    },
    "type": "endpoint"
}
],
},
{
    "conditions": [
        {
            "fn": "isSet",
            "argv": [
                {
                    "ref": "Region"
                }
            ]
        }
    ],
    "type": "tree",
    "rules": [
        {
            "conditions": [
                {
                    "fn": "aws.partition",
                    "argv": [
                        {
                            "ref": "Region"
                        }
                    ]
                }
            ]
        }
    ]
}

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```

    ],
    "assign": "PartitionResult"
  }
],
"type": "tree",

"rules": [
  {
    "conditions": [
      {
        "fn": "booleanEquals",
        "argv": [
          {
            "ref": "UseFIPS"
          },
          true
        ]
      },
      {
        "fn": "booleanEquals",
        "argv": [
          {
            "ref": "UseDualStack"
          },
          true
        ]
      }
    ],
    "type": "tree",
    "rules": [
      {
        "conditions": [
          {
            "fn": "booleanEquals",
            "argv": [
              true,
              {
                "fn": "getAttr",
                "argv": [
                  {
                    "ref": "PartitionResult"
                  },
                  "supportsFIPS"
                ]
              }
            ]
          }
        ]
      }
    ]
  }
]

```



```

    },
    {
      "fn": "booleanEquals",
      "argv": [
        true,
        {
          "fn": "getAttr",
          "argv": [
            {
              "ref": "PartitionResult"
            },
            "supportsDualStack"
          ]
        }
      ]
    }
  ],
  "type": "tree",
  "rules": [
    {
      "conditions": [],
      "endpoint": {
        "url": "https://license-manager-user-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
        "properties": {},
        "headers": {}
      },
      "type": "endpoint"
    }
  ],
  {
    "conditions": [],
    "error": "FIPS and DualStack are enabled, but this partition does not support one or
both",
    "type": "error"
  }
],
{
  "conditions": [
    {
      "fn": "booleanEquals",
      "argv": [
        {
          "ref": "UseFIPS"
        }
      ]
    }
  ]
}

```

```

        },
        true
    ]
}
],
"type": "tree",

"rules": [
    {
        "conditions": [
            {
                "fn": "booleanEquals",
                "argv": [
                    true,
                    {
                        "fn": "getAttr",
                        "argv": [
                            {
                                "ref": "PartitionResult"
                            },
                        ],
                        "supportsFIPS"
                    }
                ]
            }
        ]
    },
    {
        "type": "tree",
        "rules": [
            {
                "conditions": [],
                "endpoint": {
                    "url": "https://license-manager-user-subscriptions-
fips.{Region}.{PartitionResult#dnsSuffix}",
                    "properties": {},
                    "headers": {}
                }
            },
            {
                "type": "endpoint"
            }
        ]
    },
    {
        "conditions": [],
        "error": "FIPS is enabled but this partition does not support FIPS",
        "type": "error"
    }
]
]

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},
{
  "conditions": [
    {
      "fn": "booleanEquals",
      "argv": [
        {
          "ref": "UseDualStack"
        },
        true
      ]
    }
  ],
  "type": "tree",
  "rules": [
    {
      "conditions": [
        {
          "fn": "booleanEquals",
          "argv": [
            true,
            {
              "fn": "getAttr",
              "argv": [
                {
                  "ref": "PartitionResult"
                },
                "supportsDualStack"
              ]
            }
          ]
        }
      ]
    }
  ],
  "type": "tree",
  "rules": [
    {
      "conditions": [],
      "endpoint": {
        "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
        "properties": {},
        "headers": {}
      },
      "type": "endpoint"
    }
  ]
}

```

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        },
        {
            "conditions": [],
            "error": "DualStack is enabled but this partition does
not support DualStack",
            "type": "error"
        }
    ]
},
{
    "conditions": [],
    "endpoint": {
        "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",
        "properties": {},
        "headers": {}
    },
    "type": "endpoint"
}
]
}
]
},
{
    "conditions":
[],
    "error": "Invalid Configuration: Missing Region",
    "type": "error"
}
]
},
"smithy.rules#endpointTests": {
    "testCases": [
        {
            "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
                }
            },
            "params": {
                "Region": "us-east-1",
                "UseFIPS": true,
                "UseDualStack": true
            }
        },
        {
            "documentation":

```

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"For region us-east-1 with FIPS enabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-user-subscriptions-fips.us-east-1.amazonaws.com"
    }
  },
  "params": {
    "Region": "us-east-1",
    "UseFIPS": true,
    "UseDualStack": false
  }
},
{
  "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-user-subscriptions.us-east-1.api.aws"
    }
  },
  "params": {
    "Region": "us-east-1",
    "UseFIPS": false,
    "UseDualStack": true
  }
},
{
  "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-user-subscriptions.us-east-1.amazonaws.com"
    }
  },
  "params": {
    "Region": "us-east-1",
    "UseFIPS": false,
    "UseDualStack": false
  }
},
{
  "documentation": "For region cn-north-1 with
FIPS enabled and DualStack enabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-user-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
    }
  },

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```

    "params": {
      "Region": "cn-north-1",
      "UseFIPS": true,
      "UseDualStack": true
    }
  },
  {
    "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-user-subscriptions-fips.cn-north-1.amazonaws.com.cn"
      }
    },
    "params": {
      "Region": "cn-north-1",
      "UseFIPS": true,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-user-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
      }
    },
    "params": {
      "Region": "cn-north-1",
      "UseFIPS": false,
      "UseDualStack": true
    }
  },
  {
    "documentation": "For region cn-north-1
with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-user-subscriptions.cn-north-1.amazonaws.com.cn"
      }
    },
    "params": {
      "Region": "cn-north-1",
      "UseFIPS": false,
      "UseDualStack": false
    }
  },
  {

```

```

    "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.api.aws"
      }
    },
    "params": {
      "Region": "us-gov-east-1",
      "UseFIPS": true,
      "UseDualStack": true
    }
  },
  {
    "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.amazonaws.com"
      }
    },
    "params": {
      "Region": "us-gov-east-1",
      "UseFIPS": true,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region us-gov-east-1
with FIPS disabled and DualStack enabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-user-subscriptions.us-gov-east-1.api.aws"
      }
    },
    "params": {
      "Region": "us-gov-east-1",
      "UseFIPS": false,
      "UseDualStack": true
    }
  },
  {
    "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-user-subscriptions.us-gov-east-1.amazonaws.com"
      }
    },
  },

```

```

"params": {
  "Region": "us-gov-east-1",
  "UseFIPS": false,
  "UseDualStack": false
}
},
{
  "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
  "expect": {
    "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
  },
  "params": {
    "Region": "us-iso-east-1",
    "UseFIPS": true,
    "UseDualStack": true
  }
},
{
  "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
  "expect":
{
  "endpoint": {
    "url": "https://license-manager-user-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
  }
},
  "params": {
    "Region": "us-iso-east-1",
    "UseFIPS": true,
    "UseDualStack": false
  }
},
{
  "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
  "expect": {
    "error": "DualStack is enabled but this partition does not support DualStack"
  },
  "params": {
    "Region": "us-iso-east-1",
    "UseFIPS": false,
    "UseDualStack":
true
  }
},
{
  "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-user-subscriptions.us-iso-east-1.c2s.ic.gov"
    }
  }
}

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    }
  },
  "params": {
    "Region": "us-iso-east-1",
    "UseFIPS": false,
    "UseDualStack": false
  }
},
{
  "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
  "expect": {
    "error": "FIPS and DualStack are enabled, but
this partition does not support one or both"
  },
  "params": {
    "Region": "us-isob-east-1",
    "UseFIPS": true,
    "UseDualStack": true
  }
},
{
  "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-user-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
    }
  },
  "params": {
    "Region": "us-isob-east-1",
    "UseFIPS": true,
    "UseDualStack": false
  }
},
{
  "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
  "expect": {
    "error": "DualStack is enabled but this partition does not support DualStack"
  },
  "params": {
    "Region": "us-isob-east-1",
    "UseFIPS": false,
    "UseDualStack": true
  }
},
{
  "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
  "expect": {

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    "endpoint": {
      "url": "https://license-manager-user-subscriptions.us-isob-east-1.sc2s.sgov.gov"
    }
  },
  "params": {
    "Region": "us-isob-east-1",
    "UseFIPS": false,
    "UseDualStack": false
  }
},
{
  "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
  "expect": {
    "endpoint": {
      "url": "https://example.com"
    }
  },
  "params": {
    "Region": "us-east-1",
    "UseFIPS": false,
    "UseDualStack": false,
    "Endpoint": "https://example.com"
  }
},
{

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"documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
  "expect": {
    "endpoint": {
      "url": "https://example.com"
    }
  },
  "params": {
    "UseFIPS": false,
    "UseDualStack": false,
    "Endpoint": "https://example.com"
  }
},
{
  "documentation": "For custom endpoint with fips enabled and dualstack disabled",
  "expect": {
    "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
  },
  "params": {
    "Region": "us-east-1",
    "UseFIPS": true,
    "UseDualStack": false,
    "Endpoint": "https://example.com"
  }
}

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    }
  },
  {
    "documentation": "For custom endpoint with fips disabled and dualstack enabled",
    "expect": {
      "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
    },
    "params": {
      "Region": "us-east-1",
      "UseFIPS": false,
      "UseDualStack": true,
      "Endpoint": "https://example.com"
    }
  },
  {
    "documentation": "Missing region",
    "expect": {
      "error": "Invalid Configuration: Missing Region"
    }
  }
],
"version": "1.0"
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerErrorException"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
    }
  ]
}

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    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ThrottlingException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Lists the identity providers for user-based subscriptions.</p>",
    "smithy.api#http": {
      "code": 200,
      "method": "POST",
      "uri": "/identity-provider/ListIdentityProviders"
    },
    "smithy.api#paginated":
  {
    "inputToken": "NextToken",
    "outputToken": "NextToken",
    "pageSize": "MaxResults",
    "items": "IdentityProviderSummaries"
  }
  },
  "com.amazonaws.licenseanagerusersubscriptions#ListIdentityProvidersRequest": {
    "type": "structure",
    "members": {
      "MaxResults": {
        "target": "com.amazonaws.licenseanagerusersubscriptions#BoxInteger",
        "traits": {
          "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
        }
      },
      "NextToken": {
        "target": "smithy.api#String",
        "traits": {
          "smithy.api#documentation": "<p>Token for the next set of results.</p>"
        }
      }
    }
  },
  "com.amazonaws.licenseanagerusersubscriptions#ListIdentityProvidersResponse":
  {
    "type": "structure",
    "members": {
      "IdentityProviderSummaries": {
        "target": "com.amazonaws.licenseanagerusersubscriptions#IdentityProviderSummaryList",
        "traits": {

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        "smithy.api#documentation": "<p>Metadata that describes the list identity providers operation.</p>",
        "smithy.api#required": {}
    }
},
"NextToken": {
    "target": "smithy.api#String",
    "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
    }
}
},
"com.amazonaws.licenseanagerusersubscriptions#ListInstances": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licenseanagerusersubscriptions#ListInstancesRequest"
    },
    "output": {
        "target": "com.amazonaws.licenseanagerusersubscriptions#ListInstancesResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licenseanagerusersubscriptions#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licenseanagerusersubscriptions#ConflictException"
        },
        {
            "target": "com.amazonaws.licenseanagerusersubscriptions#InternalServerErrorException"
        },
        {
            "target": "com.amazonaws.licenseanagerusersubscriptions#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licenseanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
            "target": "com.amazonaws.licenseanagerusersubscriptions#ThrottlingException"
        },
        {
            "target": "com.amazonaws.licenseanagerusersubscriptions#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists the EC2 instances providing user-based subscriptions.</p>",
        "smithy.api#http": {
            "code": 200,
            "method": "POST",

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        "uri": "/instance/ListInstances"
    },
    "smithy.api#paginated": {
        "inputToken": "NextToken",
        "outputToken": "NextToken",
        "pageSize": "MaxResults",
        "items": "InstanceSummaries"
    }
}
},
"com.amazonaws.licenseanagerusersubscriptions#ListInstancesRequest": {
    "type": "structure",
    "members": {
        "MaxResults": {
            "target": "com.amazonaws.licenseanagerusersubscriptions#BoxInteger",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        },
        "NextToken": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        },
        "Filters": {
            "target": "com.amazonaws.licenseanagerusersubscriptions#FilterList",
            "traits": {
                "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those
that match one or\n    more sets of key-value pairs that you specify.</p>"
            }
        }
    }
},
"com.amazonaws.licenseanagerusersubscriptions#ListInstancesResponse": {
    "type":
"structure",
    "members": {
        "InstanceSummaries": {
            "target": "com.amazonaws.licenseanagerusersubscriptions#InstanceSummaryList",
            "traits": {
                "smithy.api#documentation": "<p>Metadata that describes the list instances operation.</p>"
            }
        },
        "NextToken": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    }
}
}

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    }
  }
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerErrorException"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Lists the user-based subscription products available from an identity provider.</p>",
    "smithy.api#http": {
      "code": 200,
      "method": "POST",
      "uri": "/user/ListProductSubscriptions"
    },
    "smithy.api#paginated": {
      "inputToken": "NextToken",
      "outputToken": "NextToken",
      "pageSize": "MaxResults",
      "items": "ProductUserSummaries"
    }
  }
}

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    }
  },
  "com.amazonaws.licenseanagerusersubscriptions#ListProductSubscriptionsRequest": {
    "type": "structure",
    "members": {
      "Product": {
        "target": "smithy.api#String",
        "traits": {
          "smithy.api#documentation": "<p>The name
of the user-based subscription product.</p>",
          "smithy.api#required": {}
        }
      },
      "IdentityProvider": {
        "target": "com.amazonaws.licenseanagerusersubscriptions#IdentityProvider",
        "traits": {
          "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
          "smithy.api#required": {}
        }
      },
      "MaxResults": {
        "target": "com.amazonaws.licenseanagerusersubscriptions#BoxInteger",
        "traits": {
          "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
        }
      },
      "Filters": {
        "target": "com.amazonaws.licenseanagerusersubscriptions#FilterList",
        "traits": {
          "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those that match
one or\n more sets of key-value pairs that you specify.</p>"
        }
      },
      "NextToken": {
        "target": "smithy.api#String",
        "traits": {
          "smithy.api#documentation": "<p>Token for the next set of results.</p>"
        }
      }
    }
  },
  "com.amazonaws.licenseanagerusersubscriptions#ListProductSubscriptionsResponse": {
    "type": "structure",
    "members": {
      "ProductUserSummaries": {
        "target": "com.amazonaws.licenseanagerusersubscriptions#ProductUserSummaryList",

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        "traits": {
            "smithy.api#documentation": "<p>Metadata that describes the list product subscriptions
operation.</p>"
        }
    },

    "NextToken": {
        "target": "smithy.api#String",
        "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
        }
    }
},

"com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
            "target":
"com.amazonaws.licensemanagerusersubscriptions#InternalServerError"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists user associations for an identity provider.</p>",

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    "smithy.api#http": {
      "code": 200,
      "method": "POST",
      "uri": "/user/ListUserAssociations"
    },
    "smithy.api#paginated":
  {
    "inputToken": "NextToken",
    "outputToken": "NextToken",
    "pageSize": "MaxResults",
    "items": "InstanceUserSummaries"
  }
},
"com.amazonaws.licenseanagerusersubscriptions#ListUserAssociationsRequest": {
  "type": "structure",
  "members": {
    "InstanceId": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
        "smithy.api#required": {}
      }
    },
    "IdentityProvider": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#IdentityProvider",
      "traits": {
        "smithy.api#documentation": "<p>An object that specifies details for the identity
provider.</p>",
        "smithy.api#required": {}
      }
    },
    "MaxResults": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#BoxInteger",
      "traits": {
        "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
      }
    },
    "Filters": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#FilterList",
      "traits": {
        "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those
that match one or\n    more sets of key-value pairs that you specify.</p>"
      }
    },
    "NextToken": {
      "target": "smithy.api#String",

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        "traits": {
            "smithy.api#documentation": "<p>Token for
the next set of results.</p>"
        }
    },
    "com.amazonaws.licenseanagerusersubscriptions#ListUserAssociationsResponse": {
        "type": "structure",
        "members": {
            "InstanceUserSummaries": {
                "target": "com.amazonaws.licenseanagerusersubscriptions#InstanceUserSummaryList",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the list user association operation.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        }
    },
    "com.amazonaws.licenseanagerusersubscriptions#ProductUserSummary": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider of the user.</p>",
                    "smithy.api#required": {}
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licenseanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
                }
            }
        }
    }
}

```

```

    },
    "Status": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The status of a product for a user.</p>",
        "smithy.api#required": {}
      }
    },
    "StatusMessage": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The status message for a product for a user.</p>"
      }
    },
    "Domain": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The domain name of the user.</p>"
      }
    },
    "SubscriptionStartDate": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The
start date of a subscription.</p>"
      }
    },
    "SubscriptionEndDate": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The end date of a subscription.</p>"
      }
    },
    "traits": {
      "smithy.api#documentation": "<p>The summary of the user-based subscription products for a user.</p>"
    }
  },
  "com.amazonaws.licenseanagerusersubscriptions#ProductUserSummaryList": {
    "type": "list",
    "member": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ProductUserSummary"
    }
  },
  "com.amazonaws.licenseanagerusersubscriptions#RegisterIdentityProvider": {
    "type": "operation",
    "input": {

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    "target": "com.amazonaws.licenseanagerusersubscriptions#RegisterIdentityProviderRequest"
  },
  "output": {
    "target": "com.amazonaws.licenseanagerusersubscriptions#RegisterIdentityProviderResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ConflictException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#InternalServerErrorException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ResourceNotFoundException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ServiceQuotaExceededException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ThrottlingException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Registers an identity provider for user-based subscriptions.</p>",
    "smithy.api#http": {
      "code": 200,
      "method": "POST",
      "uri": "/identity-provider/RegisterIdentityProvider"
    },
    "smithy.api#idempotent": {}
  }
},
"com.amazonaws.licenseanagerusersubscriptions#RegisterIdentityProviderRequest": {
  "type": "structure",
  "members": {
    "IdentityProvider": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#IdentityProvider",
      "traits": {
        "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
        "smithy.api#required": {}
      }
    }
  }
}

```

```

    },
    "Product": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
        "smithy.api#required": {}
      }
    },
    "Settings": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#Settings",
      "traits": {
        "smithy.api#documentation": "<p>The registered identity providers product related configuration settings such as the\n    subnets to provision VPC endpoints.</p>"
      }
    }
  },
  "com.amazonaws.licenseanagerusersubscriptions#RegisterIdentityProviderResponse": {
    "type": "structure",
    "members": {
      "IdentityProviderSummary": {
        "target": "com.amazonaws.licenseanagerusersubscriptions#IdentityProviderSummary",
        "traits": {
          "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider operation.</p>",
          "smithy.api#required": {}
        }
      }
    }
  },
  "com.amazonaws.licenseanagerusersubscriptions#ResourceNotFoundException": {
    "type": "structure",
    "members": {
      "message": {
        "target": "smithy.api#String"
      }
    },
    "traits": {
      "smithy.api#documentation": "<p>The resource couldn't be found.</p>",
      "smithy.api#error": "client",
      "smithy.api#httpError": 404
    }
  },
  "com.amazonaws.licenseanagerusersubscriptions#SecurityGroup": {
    "type": "string",

```

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"traits": {
  "smithy.api#length": {
    "min": 5,
    "max": 200
  },
  "smithy.api#pattern": "^sg-([0-9a-z]{8})([0-9a-z]{17})$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
  "type": "structure",
  "members": {
    "message": {
      "target": "smithy.api#String"
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>The request failed because a service quota is exceeded.</p>",
    "smithy.api#error": "client"
  }
},
"com.amazonaws.licensemanagerusersubscriptions#Settings": {
  "type": "structure",
  "members": {
    "Subnets": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
      "traits": {
        "smithy.api#documentation":
"<p>The subnets defined for the registered identity provider.</p>",
        "smithy.api#length": {
          "min": 1
        },
        "smithy.api#required": {}
      }
    },
    "SecurityGroupId": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
      "traits": {
        "smithy.api#documentation": "<p>A security group ID that allows inbound TCP port 1688
communication between resources in\n    your VPC and the VPC endpoint for activation servers.</p>",
        "smithy.api#required": {}
      }
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>The registered identity providers product related configuration settings
such as the\n    subnets to provision VPC endpoints, and the security group ID that
is associated with the VPC\n    endpoints. The security group should permit inbound TCP port 1688
communication from resources\n    in the VPC.</p>"
  }
}

```

```

    }
  },
  "com.amazonaws.licenseanagerusersubscriptions#StartProductSubscription": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#StartProductSubscriptionRequest"
    },
    "output": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#StartProductSubscriptionResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licenseanagerusersubscriptions#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licenseanagerusersubscriptions#ConflictException"
      },
      {
        "target": "com.amazonaws.licenseanagerusersubscriptions#InternalServerError"
      },
      {
        "target": "com.amazonaws.licenseanagerusersubscriptions#ResourceNotFoundException"
      },
      {
        "target": "com.amazonaws.licenseanagerusersubscriptions#ServiceQuotaExceededException"
      },
      {
        "target": "com.amazonaws.licenseanagerusersubscriptions#ThrottlingException"
      },
      {
        "target": "com.amazonaws.licenseanagerusersubscriptions#ValidationException"
      }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Starts a product subscription for a user with the specified identity provider.</p>\n      <note>\n        <p>Your estimated bill for charges on the number of users and related costs will take 48\n          hours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing status) in Amazon Web Services Billing. For more information, see <a href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n            monthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n        </note>",
      "smithy.api#http": {
        "code": 200,
        "method": "POST",
        "uri": "/user/StartProductSubscription"
      }
    }
  },

```



```

"com.amazonaws.licenseanagerusersubscriptions#StartProductSubscriptionRequest": {
  "type": "structure",
  "members": {
    "Username": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The user name from the identity provider of the user.</p>",
        "smithy.api#required": {}
      }
    },
    "IdentityProvider": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#IdentityProvider",
      "traits": {
        "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
        "smithy.api#required": {}
      }
    },
    "Product": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
        "smithy.api#required": {}
      }
    },
    "Domain": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The domain name of the user.</p>"
      }
    }
  }
},
"com.amazonaws.licenseanagerusersubscriptions#StartProductSubscriptionResponse": {
  "type": "structure",
  "members": {
    "ProductUserSummary": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ProductUserSummary",
      "traits": {
        "smithy.api#documentation": "<p>Metadata that describes the start product subscription operation.</p>",
        "smithy.api#required": {}
      }
    }
  }
},
"com.amazonaws.licenseanagerusersubscriptions#StopProductSubscription": {
  "type": "operation",
  "input": {

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    "target": "com.amazonaws.licenseanagerusersubscriptions#StopProductSubscriptionRequest"
  },
  "output": {
    "target": "com.amazonaws.licenseanagerusersubscriptions#StopProductSubscriptionResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#AccessDeniedException"
    }
  ],
  {
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ConflictException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#InternalServerErrorException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ResourceNotFoundException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ServiceQuotaExceededException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ThrottlingException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Stops a product subscription for a user with the specified identity provider.</p>",
    "smithy.api#http": {
      "code": 200,
      "method": "POST",
      "uri": "/user/StopProductSubscription"
    }
  },
  "com.amazonaws.licenseanagerusersubscriptions#StopProductSubscriptionRequest": {
    "type": "structure",
    "members": {
      "Username": {
        "target": "smithy.api#String",
        "traits": {
          "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
          "smithy.api#required": {}
        }
      }
    }
  }

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    },
    "IdentityProvider": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#IdentityProvider",
      "traits": {
        "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
        "smithy.api#required":
      }
    },
    "Product": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
        "smithy.api#required": {}
      }
    },
    "Domain": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The domain name of the user.</p>"
      }
    }
  },
  "com.amazonaws.licenseanagerusersubscriptions#StopProductSubscriptionResponse": {
    "type": "structure",
    "members": {
      "ProductUserSummary": {
        "target": "com.amazonaws.licenseanagerusersubscriptions#ProductUserSummary",
        "traits": {
          "smithy.api#documentation":
            "<p>Metadata that describes the start product subscription operation.</p>",
          "smithy.api#required": {}
        }
      }
    }
  },
  "com.amazonaws.licenseanagerusersubscriptions#StringList": {
    "type": "list",
    "member": {
      "target": "smithy.api#String"
    }
  },
  "com.amazonaws.licenseanagerusersubscriptions#Subnet": {
    "type": "string",
    "traits": {
      "smithy.api#pattern": "subnet-[a-z0-9]{8,17}"
    }
  }
}

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},
"com.amazonaws.licenseanagerusersubscriptions#Subnets": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licenseanagerusersubscriptions#Subnet"
  }
},
"com.amazonaws.licenseanagerusersubscriptions#ThrottlingException": {
  "type": "structure",
  "members": {
    "message": {
      "target": "smithy.api#String"
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>The request was denied because of request throttling. Retry the request.</p>",
    "smithy.api#error": "client"
  }
},
"com.amazonaws.licenseanagerusersubscriptions#UpdateIdentityProviderSettings": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licenseanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
  },
  "output": {
    "target": "com.amazonaws.licenseanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#InternalServerError"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ThrottlingException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Updates additional product configuration settings for the registered identity\n provider.</p>",
    "smithy.api#http": {
      "code": 200,

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        "method": "POST",
        "uri": "/identity-provider/UpdateIdentityProviderSettings"
    },
    "smithy.api#idempotent": {}
}
},
"com.amazonaws.licenseanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
    "type": "structure",
    "members": {
        "IdentityProvider": {
            "target": "com.amazonaws.licenseanagerusersubscriptions#IdentityProvider",
            "traits": {
                "smithy.api#required": {}
            }
        },
        "Product": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                "smithy.api#required": {}
            }
        },
        "UpdateSettings": {
            "target": "com.amazonaws.licenseanagerusersubscriptions#UpdateSettings",
            "traits": {
                "smithy.api#documentation": "<p>Updates the registered identity providers product related configuration settings. You can\n    update any combination of settings in a single operation such as the:</p>\n<ul>\n    <li>\n        <p>Subnets which you want to add to provision VPC endpoints.</p>\n    </li>\n    <li>\n        <p>Subnets which you want to remove the VPC endpoints from.</p>\n    </li>\n    <li>\n        <p>Security group ID which permits traffic to the VPC endpoints.</p>\n    </li>\n    </ul>",
                "smithy.api#required": {}
            }
        }
    }
},
"com.amazonaws.licenseanagerusersubscriptions#UpdateIdentityProviderSettingsResponse": {
    "type": "structure",
    "members": {
        "IdentityProviderSummary": {
            "target": "com.amazonaws.licenseanagerusersubscriptions#IdentityProviderSummary",
            "traits": {
                "smithy.api#required": {}
            }
        }
    }
},
"com.amazonaws.licenseanagerusersubscriptions#UpdateSettings": {
    "type": "structure",

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"members": {
  "AddSubnets": {

    "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
    "traits": {
      "smithy.api#documentation": "<p>The ID of one or more subnets in which License Manager will
create a VPC endpoint for products that\n    require connectivity to activation servers.</p>",
      "smithy.api#required": {}
    }
  },
  "RemoveSubnets": {
    "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
    "traits": {
      "smithy.api#documentation": "<p>The ID of one or more subnets to remove.</p>",
      "smithy.api#required": {}
    }
  },
  "SecurityGroupId": {
    "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
    "traits": {
      "smithy.api#documentation": "<p>A security group ID
that allows inbound TCP port 1688 communication between resources in\n    your VPC and the VPC endpoints for
activation servers.</p>"
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Updates the registered identity providers product related configuration
settings such as\n    the subnets to provision VPC endpoints.</p>"
  }
},
"com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
  "type": "structure",
  "members": {
    "message": {
      "target": "smithy.api#String"
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>A parameter is not valid.</p>",
    "smithy.api#error": "client"
  }
}
}
}
{
  "smithy": "2.0",
  "metadata": {

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"suppressions": [
  {
    "id": "HttpMethodSemantics",
    "namespace": "*"
  },
  {
    "id": "HttpResponseCodeSemantics",
    "namespace": "*"
  },
  {
    "id": "PaginatedTrait",
    "namespace": "*"
  },
  {
    "id": "HttpHeaderTrait",
    "namespace": "*"
  },
  {
    "id": "HttpUriConflict",
    "namespace": "*"
  },
  {
    "id": "Service",
    "namespace": "*"
  }
]
},
"shapes": {
  "com.amazonaws.licensemanager#AWSLicenseManager": {
    "type": "service",
    "version": "2018-08-01",
    "operations": [
      {
        "target": "com.amazonaws.licensemanager#AcceptGrant"
      },
      {
        "target": "com.amazonaws.licensemanager#CheckInLicense"
      },
      {
        "target": "com.amazonaws.licensemanager#CheckoutBorrowLicense"
      },
      {
        "target": "com.amazonaws.licensemanager#CheckoutLicense"
      },
      {
        "target": "com.amazonaws.licensemanager#CreateGrant"
      },
    ]
  }
}

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    {
      "target": "com.amazonaws.licensemanager#CreateGrantVersion"
    },
    {
      "target": "com.amazonaws.licensemanager#CreateLicense"
    },
    {
      "target": "com.amazonaws.licensemanager#CreateLicenseConfiguration"
    },
    {
      "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource"
    },
    {
      "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator"
    },
    {
      "target": "com.amazonaws.licensemanager#CreateLicenseVersion"
    },
    {
      "target": "com.amazonaws.licensemanager#CreateToken"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteGrant"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteLicense"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteLicenseConfiguration"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteToken"
    },
    {
      "target": "com.amazonaws.licensemanager#ExtendLicenseConsumption"
    },
  },
  {
    "target": "com.amazonaws.licensemanager#GetAccessToken"
  },
  {
    "target": "com.amazonaws.licensemanager#GetGrant"
  },
  {
    "target": "com.amazonaws.licensemanager#GetLicense"
  }

```



```

},
{
  "target": "com.amazonaws.licensemanager#GetLicenseConfiguration"
},
{
  "target": "com.amazonaws.licensemanager#GetLicenseConversionTask"
},
{
  "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGenerator"
},
{
  "target": "com.amazonaws.licensemanager#GetLicenseUsage"
},
{
  "target": "com.amazonaws.licensemanager#GetServiceSettings"
},
{
  "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration"
},
{
  "target": "com.amazonaws.licensemanager#ListDistributedGrants"
},
{
  "target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations"
},
{
  "target": "com.amazonaws.licensemanager#ListLicenseConfigurations"
},
{
  "target": "com.amazonaws.licensemanager#ListLicenseConversionTasks"
},
{
  "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators"
},
{
  "target": "com.amazonaws.licensemanager#ListLicenses"
},
{
  "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResource"
},
{
  "target": "com.amazonaws.licensemanager#ListLicenseVersions"
},
{
  "target": "com.amazonaws.licensemanager#ListReceivedGrants"
},
{

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    "target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganization"
  },
  {
    "target": "com.amazonaws.licensemanager#ListReceivedLicenses"
  },
  {
    "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganization"
  },
  {
    "target": "com.amazonaws.licensemanager#ListResourceInventory"
  },
  {
    "target": "com.amazonaws.licensemanager#ListTagsForResource"
  },
  {
    "target": "com.amazonaws.licensemanager#ListTokens"
  },
  {
    "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfiguration"
  },
  {
    "target": "com.amazonaws.licensemanager#RejectGrant"
  },
  {
    "target": "com.amazonaws.licensemanager#TagResource"
  },
  {
    "target": "com.amazonaws.licensemanager#UntagResource"
  },
  {
    "target": "com.amazonaws.licensemanager#UpdateLicenseConfiguration"
  },
  {
    "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator"
  },
  {
    "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource"
  },
  {
    "target": "com.amazonaws.licensemanager#UpdateServiceSettings"
  }
],
"traits": {
  "aws.api#service": {
    "sdkId": "License Manager",
    "arnNamespace": "license-manager",
    "cloudFormationName": "LicenseManager",
    "cloudTrailEventSource": "licensemanager.amazonaws.com",

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```

    "endpointPrefix": "license-manager"
  },
  "aws.auth#sigv4": {
    "name": "license-manager"
  },
  "aws.protocols#awsJson1_1": {},
  "smithy.api#documentation": "<p>License Manager makes it easier to manage licenses from software vendors across multiple \n      Amazon Web Services accounts and on-premises servers.</p>",
  "smithy.api#title": "AWS License Manager",
  "smithy.api#xmlNamespace": {
    "uri": "https://license-manager.amazonaws.com/doc/2018_08_01"
  },
  "smithy.rules#endpointRuleSet": {
    "version": "1.0",
    "parameters": {
      "Region": {
        "builtIn": "AWS::Region",
        "required": false,
        "documentation": "The AWS region used to dispatch the request.",
        "type": "String"
      },
      "UseDualStack": {
        "builtIn": "AWS::UseDualStack",
        "required": true,
        "default": false,
        "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
        "type": "Boolean"
      },
      "UseFIPS": {
        "builtIn": "AWS::UseFIPS",
        "required": true,
        "default": false,
        "documentation": "When true, send
this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
        "type": "Boolean"
      },
      "Endpoint": {
        "builtIn": "SDK::Endpoint",
        "required": false,
        "documentation": "Override the endpoint used to send this request",
        "type": "String"
      }
    },
    "rules": [
      {
        "conditions": [

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    {
      "fn": "isSet",
      "argv": [
        {
          "ref": "Endpoint"
        }
      ]
    }
  ],
  "type": "tree",
  "rules": [
    {
      "conditions": [
        {
          "fn": "booleanEquals",
          "argv": [
            {
              "ref": "UseFIPS"
            },
            true
          ]
        }
      ],
      "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
      "type": "error"
    },
    {
      "conditions": [
        {
          "fn": "booleanEquals",
          "argv": [
            {
              "ref": "UseDualStack"
            },
            true
          ]
        }
      ],
      "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
      "type": "error"
    },
    {
      "conditions": [],
      "endpoint": {
        "url": {
          "ref": "Endpoint"
        }
      }
    }
  ]
}

```

```

        },
        "properties": {},
        "headers": {}
    },
    "type": "endpoint"
}
]
},
{
    "conditions": [
        {
            "fn": "isSet",
            "argv": [
                {
                    "ref": "Region"
                }
            ]
        }
    ]
},
"type": "tree",
"rules": [
    {
        "conditions": [
            {
                "fn": "aws.partition",
                "argv": [
                    {
                        "ref": "Region"
                    }
                ]
            },
            "assign": "PartitionResult"
        ]
    },
    "type": "tree",
    "rules": [
        {
            "conditions": [
                {
                    "fn": "booleanEquals",
                    "argv": [
                        {
                            "ref":

```

"UseFIPS"

```

                    },
                    true
                ]
            },
            {

```

```

        "fn": "booleanEquals",
        "argv": [
            {
                "ref": "UseDualStack"
            },
            true
        ]
    },
    "type": "tree",
    "rules": [
        {
            "conditions": [
                {
                    "fn": "booleanEquals",
                    "argv": [
                        true,
                        {
                            "fn": "getAttr",
                            "argv": [
                                {
                                    "ref": "PartitionResult"
                                },
                                "supportsFIPS"
                            ]
                        }
                    ]
                }
            ]
        },
        {
            "fn": "booleanEquals",
            "argv": [
                true,
                {
                    "fn": "getAttr",
                    "argv": [
                        {
                            "ref": "PartitionResult"
                        },
                    ],
                }
            ]
        }
    ],
    "supportsDualStack"
}

```

```

        {
            "conditions": [],
            "endpoint": {
                "url": "https://license-manager-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                "properties": {},
                "headers": {}
            },
            "type": "endpoint"
        }
    ],
    },
    {
        "conditions": [],
        "error": "FIPS and DualStack are enabled, but this partition does not support one or
both",
        "type": "error"
    }
]
},
{
    "conditions": [
        {
            "fn": "booleanEquals",

"argv": [
            {
                "ref": "UseFIPS"
            },
            true
        ]
    }
],
    "type": "tree",
    "rules": [
        {
            "conditions": [
                {
                    "fn": "booleanEquals",
                    "argv": [
                        true,

{
                            "fn": "getAttr",
                            "argv": [
                                {
                                    "ref": "PartitionResult"

```

```

        },
        "supportsFIPS"
    ]
}
]
}
],
"type": "tree",
"rules": [
{
    "conditions": [],
    "endpoint": {
        "url": "https://license-manager-fips.{Region}.{PartitionResult#dnsSuffix}",
        "properties": {},
        "headers": {}
    },
    "type": "endpoint"
}
],
{
    "conditions": [],
    "error": "FIPS is enabled but this
partition does not support FIPS",
    "type": "error"
}
],
{
    "conditions": [
        {
            "fn": "booleanEquals",
            "argv": [
                {
                    "ref": "UseDualStack"
                },
                true
            ]
        }
    ],
    "type": "tree",
    "rules": [
        {
            "conditions": [
                {
                    "fn": "booleanEquals",
                    "argv": [

```



```

        true,
        {
            "fn": "getAttr",
            "argv": [
                {
                    "ref": "PartitionResult"
                }
            ],
        }
    ],
    "supportsDualStack": true,
    "type": "tree",
    "rules": [
        {
            "conditions": [],
            "endpoint": {
                "url": "https://license-
manager.{Region}.{PartitionResult#dualStackDnsSuffix}",
                "properties": {},
                "headers": {}
            },
            "type": "endpoint"
        },
        {
            "conditions": [],
            "error": "DualStack is enabled but this partition does not support DualStack",
            "type": "error"
        }
    ],
    "type": "tree",
    "rules": [
        {
            "conditions": [],
            "endpoint": {
                "url": "https://license-manager.{Region}.{PartitionResult#dnsSuffix}",
                "properties": {},
                "headers": {}
            },
            "type": "endpoint"
        }
    ],
    "type": "tree"
}
]
}
]

```

```

    },
    {
      "conditions": [],
      "error": "Invalid Configuration: Missing Region",
      "type": "error"
    }
  ]
},
"smithy.rules#endpointTests": {
  "testCases": [
    {
      "documentation": "For region af-south-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint":
{
          "url": "https://license-manager.af-south-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "af-south-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region ap-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.ap-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "ap-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region ap-northeast-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.ap-northeast-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "ap-northeast-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    }
  ]
}

```

```

    }
  },
  {
    "documentation": "For region ap-northeast-2 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager.ap-northeast-2.amazonaws.com"
      }
    },
    "params": {
      "Region": "ap-northeast-2",
      "UseFIPS": false,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region ap-northeast-3 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager.ap-northeast-3.amazonaws.com"
      }
    },
    "params": {
      "Region": "ap-northeast-3",
      "UseFIPS": false,
      "UseDualStack": false
    }
  },
},
{
  "documentation": "For region ap-south-1 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.ap-south-1.amazonaws.com"
    }
  },
  "params": {
    "Region": "ap-south-1",
    "UseFIPS": false,
    "UseDualStack": false
  }
},
{
  "documentation": "For region ap-southeast-1 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.ap-southeast-1.amazonaws.com"
    }
  }
}

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```

}
    },
    "params": {
      "Region": "ap-southeast-1",
      "UseFIPS": false,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region ap-southeast-2 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager.ap-southeast-2.amazonaws.com"
      }
    },
    "params": {
      "Region": "ap-southeast-2",
      "UseFIPS": false,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region ap-southeast-3 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager.ap-southeast-3.amazonaws.com"
      }
    },
    "params": {
      "Region": "ap-southeast-3",
      "UseFIPS": false,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region ca-central-1 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager.ca-central-1.amazonaws.com"
      }
    },
    "params": {
      "Region": "ca-central-1",
      "UseFIPS": false,
      "UseDualStack": false
    }
  }
}

```

```

    },
    {
      "documentation": "For region eu-central-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.eu-central-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "eu-central-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region eu-north-1 with FIPS
disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.eu-north-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "eu-north-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region eu-south-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.eu-south-1.amazonaws.com"
        }
      },
      "params": {
        "Region":
"eu-south-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region eu-west-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.eu-west-1.amazonaws.com"
        }
      }
    }
  ]
}

```

```

    },
    "params": {
      "Region": "eu-west-1",
      "UseFIPS": false,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region eu-west-2 with FIPS disabled and DualStack disabled",
    "expect": {

      "endpoint": {
        "url": "https://license-manager.eu-west-2.amazonaws.com"
      }
    },
    "params": {
      "Region": "eu-west-2",
      "UseFIPS": false,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region eu-west-3 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager.eu-west-3.amazonaws.com"
      }
    },
    "params": {
      "Region": "eu-west-3",
      "UseFIPS": false,

      "UseDualStack": false
    }
  },
  {
    "documentation": "For region me-south-1 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager.me-south-1.amazonaws.com"
      }
    },
    "params": {
      "Region": "me-south-1",
      "UseFIPS": false,
      "UseDualStack": false
    }
  },

```

```

{
  "documentation": "For region sa-east-1 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.sa-east-1.amazonaws.com"
    }
  },
  "params": {
    "Region": "sa-east-1",
    "UseFIPS": false,
    "UseDualStack": false
  }
},
{
  "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.us-east-1.amazonaws.com"
    }
  },
  "params": {
    "Region": "us-east-1",
    "UseFIPS": false,
    "UseDualStack": false
  }
},
{
  "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-fips.us-east-1.amazonaws.com"
    }
  },
  "params": {
    "Region": "us-east-1",
    "UseFIPS": true,
    "UseDualStack": false
  }
},
{
  "documentation": "For region us-east-2 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.us-east-2.amazonaws.com"
    }
  }
}

```

```

    },
    "params": {
      "Region": "us-east-2",
      "UseFIPS": false,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region us-east-2 with FIPS enabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-fips.us-east-2.amazonaws.com"
      }
    },
    "params": {
      "Region": "us-east-2",
      "UseFIPS": true,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region
us-west-1 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager.us-west-1.amazonaws.com"
      }
    },
    "params": {
      "Region": "us-west-1",
      "UseFIPS": false,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region us-west-1 with FIPS enabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-fips.us-west-1.amazonaws.com"
      }
    },
    "params": {
      "Region": "us-west-1",
      "UseFIPS": true,
      "UseDualStack": false
    }
  },

```



```

{
  "documentation": "For region us-west-2 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.us-west-2.amazonaws.com"
    }
  },
  "params": {
    "Region": "us-west-2",
    "UseFIPS": false,
    "UseDualStack": false
  }
},
{
  "documentation": "For region us-west-2 with FIPS enabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-fips.us-west-2.amazonaws.com"
    }
  },
  "params": {
    "Region": "us-west-2",
    "UseFIPS": true,
    "UseDualStack": false
  }
},
{
  "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-fips.us-east-1.api.aws"
    }
  },
  "params": {
    "Region": "us-east-1",
    "UseFIPS": true,
    "UseDualStack": true
  }
},
{
  "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.us-east-1.api.aws"
    }
  },

```

```

    "params": {
      "Region": "us-east-1",
      "UseFIPS": false,
      "UseDualStack": true
    }
  },
  {
    "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url":
"https://license-manager.cn-north-1.amazonaws.com.cn"
      }
    },
    "params": {
      "Region": "cn-north-1",
      "UseFIPS": false,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region cn-northwest-1 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager.cn-northwest-1.amazonaws.com.cn"
      }
    },
    "params": {
      "Region": "cn-northwest-1",
      "UseFIPS": false,
      "UseDualStack": false
    }
  }
},
{
  "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-fips.cn-north-1.api.amazonwebservices.com.cn"
    }
  },
  "params": {
    "Region": "cn-north-1",
    "UseFIPS": true,
    "UseDualStack": true
  }
},
{

```

```

    "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-fips.cn-north-1.amazonaws.com.cn"
      }
    },
    "params": {
      "Region": "cn-north-1",
      "UseFIPS": true,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager.cn-north-1.api.amazonwebservices.com.cn"
      }
    },
    "params": {
      "Region": "cn-north-1",
      "UseFIPS": false,
      "UseDualStack": true
    }
  },
  {
    "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager.us-gov-east-1.amazonaws.com"
      }
    },
    "params": {
      "Region": "us-gov-east-1",
      "UseFIPS": false,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-fips.us-gov-east-1.amazonaws.com"
      }
    },
    "params": {
      "Region": "us-gov-east-1",

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```

        "UseFIPS": true,
        "UseDualStack": false
    }
},
{
    "documentation": "For region us-gov-west-1 with FIPS disabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager.us-gov-west-1.amazonaws.com"
        }
    },
    "params": {
        "Region": "us-gov-west-1",
        "UseFIPS": false,
        "UseDualStack": false
    }
},
{
    "documentation":
"\"For region us-gov-west-1 with FIPS enabled and DualStack disabled\",
    "expect": {
        "endpoint": {
            "url": "https://license-manager-fips.us-gov-west-1.amazonaws.com"
        }
    },
    "params": {
        "Region": "us-gov-west-1",
        "UseFIPS": true,
        "UseDualStack": false
    }
},
{
    "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager-fips.us-gov-east-1.api.aws"
        }
    },
},
"params": {
    "Region": "us-gov-east-1",
    "UseFIPS": true,
    "UseDualStack": true
}
},
{
    "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
    "expect": {

```

```

        "endpoint": {
            "url": "https://license-manager.us-gov-east-1.api.aws"
        }
    },
    "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": false,
        "UseDualStack": true
    }
},
{
    "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager.us-iso-east-1.c2s.ic.gov"
        }
    },
    "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": false,
        "UseDualStack": false
    }
},
{
    "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
    "expect": {
        "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
    },
    "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": true,
        "UseDualStack": true
    }
},
{
    "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager-fips.us-iso-east-1.c2s.ic.gov"
        }
    },
    "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": true,
        "UseDualStack": false
    }
},

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```

    {
      "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
      "expect": {
        "error": "DualStack is enabled
but this partition does not support DualStack"
      },
      "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": false,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.us-isob-east-1.sc2s.sgov.gov"
        }
      },
      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
      },
      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": true,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-fips.us-isob-east-1.sc2s.sgov.gov"
        }
      },
      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": true,

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        "UseDualStack": false
    }
},
{
    "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
    "expect": {
        "error": "DualStack is enabled but this partition does not support DualStack"
    },
    "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": false,
        "UseDualStack": true
    }
},
{
    "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
    "expect": {
        "endpoint": {
            "url": "https://example.com"
        }
    },
    "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": false,
        "Endpoint": "https://example.com"
    }
},
{
    "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
    "expect": {
        "endpoint": {
            "url": "https://example.com"
        }
    },
    "params": {
        "UseFIPS": false,
        "UseDualStack": false,
        "Endpoint": "https://example.com"
    }
},
{
    "documentation": "For custom endpoint with fips enabled and dualstack disabled",
    "expect": {
        "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
    }
}

```

```

    },
    "params": {
      "Region": "us-east-1",
      "UseFIPS": true,
      "UseDualStack": false,
      "Endpoint": "https://example.com"
    }
  },
  {
    "documentation": "For custom endpoint with fips disabled and dualstack enabled",
    "expect": {
      "error":
"Invalid Configuration: Dualstack and custom endpoint are not supported"
    },
    "params": {
      "Region": "us-east-1",
      "UseFIPS": false,
      "UseDualStack": true,
      "Endpoint": "https://example.com"
    }
  },
  {
    "documentation": "Missing region",
    "expect": {
      "error": "Invalid Configuration: Missing Region"
    }
  }
],
"version": "1.0"
}
},
"com.amazonaws.licensemanager#AcceptGrant": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#AcceptGrantRequest"
  },
},
"output": {
  "target": "com.amazonaws.licensemanager#AcceptGrantResponse"
},
"errors": [
  {
    "target": "com.amazonaws.licensemanager#AccessDeniedException"
  },
  {
    "target": "com.amazonaws.licensemanager#AuthorizationException"
  },
],

```



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    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Accepts the specified grant.</p>"
  }
},
"com.amazonaws.licensemanager#AcceptGrantRequest": {
  "type": "structure",
  "members": {
    "GrantArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
        "smithy.api#required": {}
      }
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#AcceptGrantResponse": {
  "type": "structure",
  "members": {
    "GrantArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>Grant
ARN.</p>"
      }
    }
  },
  "Status": {
    "target": "com.amazonaws.licensemanager#GrantStatus",

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    "traits": {
      "smithy.api#documentation": "<p>Grant status.</p>"
    }
  },
  "Version": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Grant version.</p>"
    }
  }
},
"traits": {
  "smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#AccessDeniedException": {
  "type": "structure",
  "members": {
    "Message": {
      "target": "com.amazonaws.licensemanager#Message"
    }
  },
  "traits": {
    "aws.protocols#awsQueryError": {}
  }
},
"code": "ServiceAccessDenied",
  "httpResponseCode": 401
},
"smithy.api#documentation": "<p>Access to resource denied.</p>",
"smithy.api#error": "client",
"smithy.api#httpError": 401
}
},
"com.amazonaws.licensemanager#ActivationOverrideBehavior": {
  "type": "enum",
  "members": {
    "DISTRIBUTED_GRANTS_ONLY": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "DISTRIBUTED_GRANTS_ONLY"
      }
    },
    "ALL_GRANTS_PERMITTED_BY_ISSUER": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "ALL_GRANTS_PERMITTED_BY_ISSUER"
      }
    }
  }
}

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    }
  },
  "com.amazonaws.licensemanager#AllowedOperation": {
    "type": "enum",
    "members": {
      "CREATE_GRANT": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "CreateGrant"
        }
      },
      "CHECKOUT_LICENSE": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "CheckoutLicense"
        }
      },
      "CHECKOUT_BORROW_LICENSE": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "CheckoutBorrowLicense"
        }
      },
      "CHECK_IN_LICENSE": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "CheckInLicense"
        }
      },
      "EXTEND_CONSUMPTION_LICENSE": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "ExtendConsumptionLicense"
        }
      },
      "LIST_PURCHASED_LICENSES": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "ListPurchasedLicenses"
        }
      },
      "CREATE_TOKEN": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "CreateToken"
        }
      }
    }
  }
}

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    }
  }
},
"com.amazonaws.licensemanager#AllowedOperationList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#AllowedOperation"
  },
  "traits": {
    "smithy.api#length": {
      "min": 1,
      "max":
7
    }
  }
},
"com.amazonaws.licensemanager#Arn": {
  "type": "string",
  "traits": {
    "smithy.api#length": {
      "min": 0,
      "max": 2048
    },
    "smithy.api#pattern": "^arn:aws(-(cn|us-gov|iso-b|iso-c|iso-d)?:[A-Za-z0-9][A-Za-z0-9_/.-]{0,62}):[A-Za-
z0-9_/.-]{0,63};[A-Za-z0-9_/.-]{0,63};[A-Za-z0-9][A-Za-z0-9:/_+=,@.-]{0,1023}$"
  }
},
"com.amazonaws.licensemanager#ArnList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#Arn"
  }
},
"com.amazonaws.licensemanager#AuthorizationException": {
  "type": "structure",
  "members": {
    "Message": {
      "target": "com.amazonaws.licensemanager#Message"
    }
  },
  "traits": {
    "aws.protocols#awsQueryError":
{
      "code": "AuthorizationFailure",
      "httpResponseCode": 403
    },
    "smithy.api#documentation": "<p>The Amazon Web Services user account does not have permission to
perform the action. Check the IAM\n    policy associated with this account.</p>",

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    "smithy.api#error": "client",
    "smithy.api#httpError": 403
  }
},
"com.amazonaws.licensemanager#AutomatedDiscoveryInformation": {
  "type": "structure",
  "members": {
    "LastRunTime": {
      "target": "com.amazonaws.licensemanager#DateTime",
      "traits": {
        "smithy.api#documentation": "<p>Time that automated discovery last ran.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Describes automated discovery.</p>"
  }
},

"com.amazonaws.licensemanager#Boolean": {
  "type": "boolean",
  "traits": {
    "smithy.api#default": false
  }
},

"com.amazonaws.licensemanager#BorrowConfiguration": {
  "type": "structure",
  "members": {
    "AllowEarlyCheckIn": {
      "target": "com.amazonaws.licensemanager#BoxBoolean",
      "traits": {
        "smithy.api#documentation": "<p>Indicates whether early check-ins are allowed.</p>",
        "smithy.api#required": {}
      }
    },
    "MaxTimeToLiveInMinutes": {
      "target": "com.amazonaws.licensemanager#BoxInteger",
      "traits": {
        "smithy.api#documentation": "<p>Maximum time for the borrow configuration, in minutes.</p>",
        "smithy.api#required": {}
      }
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
  }
},

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"com.amazonaws.licensemanager#BoxBoolean": {
  "type": "boolean"
},
"com.amazonaws.licensemanager#BoxInteger": {
  "type": "integer"
},
"com.amazonaws.licensemanager#BoxLong": {
  "type": "long"
},
"com.amazonaws.licensemanager#CheckInLicense": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#CheckInLicenseRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#CheckInLicenseResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#ConflictException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Checks in the specified license. Check in a license when it is no longer
in use.</p>"
  }
}

```

```

    },
    "com.amazonaws.licensemanager#CheckInLicenseRequest":
    {
        "type": "structure",
        "members": {
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>",
                    "smithy.api#required": {}
                }
            },
            "Beneficiary": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License beneficiary.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CheckInLicenseResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicense":
    {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#EntitlementNotAllowedException"
            }
        ]
    }

```

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    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
    },
    {
      "target":
"com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#RedirectException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Checks out the specified license for offline use.</p>"
  }
},
"com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest": {
  "type": "structure",
  "members":
{
  "LicenseArn": {
    "target": "com.amazonaws.licensemanager#Arn",
    "traits": {
      "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license. The license must
use the borrow consumption configuration.</p>",
      "smithy.api#required": {}
    }
  },
  "Entitlements": {
    "target": "com.amazonaws.licensemanager#EntitlementDataList",
    "traits": {
      "smithy.api#documentation": "<p>License entitlements. Partial checkouts are not supported.</p>",
      "smithy.api#required": {}
    }
  }
}
}

```



```

    }
  },
  "DigitalSignatureMethod": {
    "target": "com.amazonaws.licensemanager#DigitalSignatureMethod",
    "traits": {
      "smithy.api#documentation": "<p>Digital signature method. The possible
value is JSON Web Signature (JWS) algorithm PS384.\n    For more information, see <a
href=\"https://tools.ietf.org/html/rfc7518#section-3.5\">RFC 7518 Digital Signature with RSASSA-PSS</a>.</p>",
      "smithy.api#required": {}
    }
  },
  "NodeId": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Node ID.</p>"
    }
  },
  "CheckoutMetadata": {
    "target": "com.amazonaws.licensemanager#MetadataList",
    "traits": {
      "smithy.api#documentation": "<p>Information about constraints.</p>"
    }
  },
  "ClientToken": {
    "target": "com.amazonaws.licensemanager#ClientToken",
    "traits": {
      "smithy.api#documentation":
"<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
      "smithy.api#required": {}
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse": {
  "type": "structure",
  "members": {
    "LicenseArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
      }
    },
    "LicenseConsumptionToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {}
    }
  }
}

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```

        "smithy.api#documentation": "<p>License consumption token.</p>"
    }
},
"EntitlementsAllowed":
{
    "target": "com.amazonaws.licensemanager#EntitlementDataList",
    "traits": {
        "smithy.api#documentation": "<p>Allowed license entitlements.</p>"
    }
},
"NodeId": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
        "smithy.api#documentation": "<p>Node ID.</p>"
    }
},
"SignedToken": {
    "target": "com.amazonaws.licensemanager#SignedToken",
    "traits": {
        "smithy.api#documentation": "<p>Signed token.</p>"
    }
},
"IssuedAt": {
    "target": "com.amazonaws.licensemanager#ISO8601DateTime",
    "traits": {
        "smithy.api#documentation": "<p>Date and time at which the license checkout
is issued.</p>"
    }
},
"Expiration": {
    "target": "com.amazonaws.licensemanager#ISO8601DateTime",
    "traits": {
        "smithy.api#documentation": "<p>Date and time at which the license checkout expires.</p>"
    }
},
"CheckoutMetadata": {
    "target": "com.amazonaws.licensemanager#MetadataList",
    "traits": {
        "smithy.api#documentation": "<p>Information about constraints.</p>"
    }
}
},
"traits": {
    "smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CheckoutLicense": {
    "type": "operation",

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"input": {
  "target": "com.amazonaws.licensemanager#CheckoutLicenseRequest"
},
"output": {
  "target": "com.amazonaws.licensemanager#CheckoutLicenseResponse"
},
"errors": [
  {
    "target": "com.amazonaws.licensemanager#AccessDeniedException"
  },
  {
    "target": "com.amazonaws.licensemanager#AuthorizationException"
  },
  {
    "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
  },
  {
    "target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
  },
  {
    "target": "com.amazonaws.licensemanager#RateLimitExceededException"
  },
  {
    "target": "com.amazonaws.licensemanager#RedirectException"
  },
  {
    "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
  },
  {
    "target":
"com.amazonaws.licensemanager#ServerInternalException"
  },
  {
    "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
  },
  {
    "target": "com.amazonaws.licensemanager#ValidationException"
  }
],
"traits": {
  "smithy.api#documentation": "<p>Checks out the specified license.</p>\n      <note>\n      <p>If the
account that created the license is the same that is performing the check out, you must\n      specify the account
as the beneficiary.</p>\n      </note>"
}
},
"com.amazonaws.licensemanager#CheckoutLicenseRequest": {
  "type": "structure",
  "members": {

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"ProductSKU": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Product
SKU.</p>",
    "smithy.api#required": {}
  }
},
"CheckoutType": {
  "target": "com.amazonaws.licensemanager#CheckoutType",
  "traits": {
    "smithy.api#documentation": "<p>Checkout type.</p>",
    "smithy.api#required": {}
  }
},
"KeyFingerprint": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Key fingerprint identifying the license.</p>",
    "smithy.api#required": {}
  }
},
"Entitlements": {
  "target": "com.amazonaws.licensemanager#EntitlementDataList",
  "traits": {
    "smithy.api#documentation": "<p>License entitlements.</p>",
    "smithy.api#required": {}
  }
},
"ClientToken": {
  "target": "com.amazonaws.licensemanager#ClientToken",
  "traits": {
    "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",
    "smithy.api#required": {}
  }
},
"Beneficiary": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>License beneficiary.</p>"
  }
},
"NodeId": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Node ID.</p>"
  }
}

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```

    }
  }
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CheckoutLicenseResponse": {
  "type": "structure",
  "members": {
    "CheckoutType": {
      "target": "com.amazonaws.licensemanager#CheckoutType",
      "traits": {
        "smithy.api#documentation": "<p>Checkout type.</p>"
      }
    },
    "LicenseConsumptionToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>License consumption token.</p>"
      }
    },
    "EntitlementsAllowed": {
      "target": "com.amazonaws.licensemanager#EntitlementDataList",
      "traits": {
        "smithy.api#documentation": "<p>Allowed license entitlements.</p>"
      }
    },
    "SignedToken": {
      "target": "com.amazonaws.licensemanager#SignedToken",
      "traits": {
        "smithy.api#documentation": "<p>Signed token.</p>"
      }
    },
    "NodeId": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Node ID.</p>"
      }
    },
    "IssuedAt": {
      "target": "com.amazonaws.licensemanager#ISO8601DateTime",
      "traits": {
        "smithy.api#documentation": "<p>Date and time at which the license checkout is issued.</p>"
      }
    },
    "Expiration": {

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        "target": "com.amazonaws.licensemanager#ISO8601DateTime",
        "traits": {
            "smithy.api#documentation": "<p>Date and
time at which the license checkout expires.</p>"
        }
    },
    "LicenseArn": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the checkout license.</p>"
        }
    }
},
"traits": {
    "smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CheckoutType": {
    "type": "enum",
    "members": {
        "PROVISIONAL": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PROVISIONAL"
            }
        },
        "PERPETUAL": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PERPETUAL"
            }
        }
    }
},
"com.amazonaws.licensemanager#ClientRequestToken": {
    "type": "string",
    "traits": {
        "smithy.api#length": {
            "min": 1,
            "max": 36
        }
    }
},
"com.amazonaws.licensemanager#ClientToken": {
    "type": "string",
    "traits": {
        "smithy.api#length": {
            "min": 0,

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        "max": 2048
      },
      "smithy.api#pattern": "^\\S+$"
    }
  },
  "com.amazonaws.licensemanager#ConflictException": {
    "type": "structure",
    "members": {
      "Message": {
        "target": "com.amazonaws.licensemanager#Message"
      }
    },
    "traits": {
      "aws.protocols#awsQueryError": {
        "code": "ConflictException",
        "httpResponseCode":
409
      },
      "smithy.api#documentation": "<p>There was a conflict processing the request. Try your request
again.</p>",
      "smithy.api#error": "client",
      "smithy.api#httpError": 409
    }
  },
  "com.amazonaws.licensemanager#ConsumedLicenseSummary": {
    "type": "structure",
    "members": {
      "ResourceType": {
        "target": "com.amazonaws.licensemanager#ResourceType",
        "traits": {
          "smithy.api#documentation": "<p>Resource type of the resource consuming a license.</p>"
        }
      },
      "ConsumedLicenses": {
        "target": "com.amazonaws.licensemanager#BoxLong",
        "traits": {
          "smithy.api#documentation": "<p>Number of licenses consumed by the resource.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#documentation": "<p>Details about license consumption.</p>"
    }
  },
  "com.amazonaws.licensemanager#ConsumedLicenseSummaryList": {
    "type": "list",
    "member": {

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    "target": "com.amazonaws.licensemanager#ConsumedLicenseSummary"
  }
},
"com.amazonaws.licensemanager#ConsumptionConfiguration": {
  "type": "structure",
  "members": {
    "RenewType": {
      "target": "com.amazonaws.licensemanager#RenewType",
      "traits": {
        "smithy.api#documentation": "<p>Renewal frequency.</p>"
      }
    },
    "ProvisionalConfiguration": {
      "target": "com.amazonaws.licensemanager#ProvisionalConfiguration",
      "traits": {
        "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
      }
    },
    "BorrowConfiguration": {
      "target": "com.amazonaws.licensemanager#BorrowConfiguration",
      "traits": {
        "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Details about a consumption configuration.</p>"
  }
},
"com.amazonaws.licensemanager#CreateGrant": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#CreateGrantRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#CreateGrantResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target":
"com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    }
  ]
}

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    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Creates a grant for the specified license. A grant shares the use of
license\n entitlements with a specific Amazon Web Services account, an organization, or an\n
organizational unit (OU). For more
information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-
licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
  }
},
"com.amazonaws.licensemanager#CreateGrantRequest": {
  "type": "structure",
  "members": {
    "ClientToken": {
      "target": "com.amazonaws.licensemanager#ClientToken",
      "traits": {
        "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",
        "smithy.api#required": {}
      }
    },
    "GrantName": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Grant name.</p>",
        "smithy.api#required": {}
      }
    }
  }
},
"LicenseArn": {
  "target": "com.amazonaws.licensemanager#Arn",
  "traits": {
    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
    "smithy.api#required": {}
  }
},
"Principals": {

```

```

    "target": "com.amazonaws.licensemanager#PrincipalArnList",
    "traits": {
      "smithy.api#documentation": "<p>The grant principals. You can specify one of the following as an Amazon Resource Name (ARN):</p>\n      <ul>\n        <li>\n          <p>An Amazon Web Services account, which includes only the account specified.</p>\n        </li>\n        <li>\n          <p>An organizational unit (OU), which includes all accounts in the OU.</p>\n        </li>\n        <li>\n          <p>An organization, which will include all accounts across your organization.</p>\n        </li>\n      </ul>",
      "smithy.api#required": {}
    }
  },
  "HomeRegion": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Home Region of the grant.</p>",
      "smithy.api#required": {}
    }
  },
  "AllowedOperations": {
    "target": "com.amazonaws.licensemanager#AllowedOperationList",
    "traits": {
      "smithy.api#documentation": "<p>Allowed operations for the grant.</p>",
      "smithy.api#required": {}
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},

"com.amazonaws.licensemanager#CreateGrantResponse": {
  "type": "structure",
  "members": {
    "GrantArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>Grant ARN.</p>"
      }
    },
    "Status": {
      "target": "com.amazonaws.licensemanager#GrantStatus",
      "traits": {
        "smithy.api#documentation": "<p>Grant status.</p>"
      }
    },
    "Version": {

```

```

        "target": "com.amazonaws.licensemanager#String",
        "traits": {
            "smithy.api#documentation": "<p>Grant version.</p>"
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CreateGrantVersion":
{
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateGrantVersionRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateGrantVersionResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Creates a new version of the specified grant. For more information, see\n    <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
    }
},

```

```

"com.amazonaws.licensemanager#CreateGrantVersionRequest": {
  "type": "structure",
  "members": {
    "ClientToken": {
      "target": "com.amazonaws.licensemanager#ClientToken",
      "traits": {
        "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",
      }
    },
    "GrantArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
        "smithy.api#required": {}
      }
    },
    "GrantName": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Grant name.</p>"
      }
    },
    "AllowedOperations": {
      "target": "com.amazonaws.licensemanager#AllowedOperationList",
      "traits": {
        "smithy.api#documentation": "<p>Allowed operations for the grant.</p>"
      }
    },
    "Status": {
      "target": "com.amazonaws.licensemanager#GrantStatus",
      "traits": {
        "smithy.api#documentation": "<p>Grant status.</p>"
      }
    },
    "StatusReason": {
      "target": "com.amazonaws.licensemanager#StatusReasonMessage",
      "traits": {
        "smithy.api#documentation": "<p>Grant status reason.</p>"
      }
    },
    "SourceVersion": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Current version of the grant.</p>"
      }
    }
  }
}

```

```

    },
    "Options": {
      "target": "com.amazonaws.licensemanager#Options",
      "traits": {
        "smithy.api#documentation": "<p>The options specified for the grant.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#CreateGrantVersionResponse": {
  "type": "structure",
  "members": {
    "GrantArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>Grant ARN.</p>"
      }
    },
    "Status": {
      "target": "com.amazonaws.licensemanager#GrantStatus",
      "traits": {
        "smithy.api#documentation": "<p>Grant status.</p>"
      }
    },
    "Version": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>New version of the grant.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#CreateLicense": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#CreateLicenseRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#CreateLicenseResponse"
  },
  "errors": [

```

```

    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#RedirectException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Creates a license.</p>"
  }
},
"com.amazonaws.licensemanager#CreateLicenseConfiguration": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {

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    "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
  },
  {
    "target": "com.amazonaws.licensemanager#ServerInternalException"
  }
],
"traits": {
  "smithy.api#documentation": "<p>Creates a license configuration.</p>\n    <p>A license configuration is an abstraction of a customer license agreement that can be\n    consumed and enforced by License Manager. Components include specifications for the license\n    type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n    Dedicated Instance, Dedicated Host, or all of these), license affinity to host (how long a \n    license must be associated with a host), and the number of licenses purchased and used.</p>"
}
},
"com.amazonaws.licensemanager#CreateLicenseConfigurationRequest": {
  "type": "structure",
  "members": {
    "Name": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Name of the license configuration.</p>",
        "smithy.api#required": {}
      }
    },
    "Description": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Description of the license configuration.</p>"
      }
    },
    "LicenseCountingType": {
      "target": "com.amazonaws.licensemanager#LicenseCountingType",
      "traits": {
        "smithy.api#documentation": "<p>Dimension used to track the license inventory.</p>",
        "smithy.api#required": {}
      }
    },
    "LicenseCount": {
      "target": "com.amazonaws.licensemanager#BoxLong",
      "traits": {
        "smithy.api#documentation": "<p>Number of licenses managed by the license configuration.</p>"
      }
    },
    "LicenseCountHardLimit": {
      "target": "com.amazonaws.licensemanager#BoxBoolean",
      "traits": {
        "smithy.api#documentation": "<p>Indicates whether hard or soft license enforcement is used.

```

```

Exceeding a hard limit\n    blocks the launch of new instances.</p>"
    }
  },
  "LicenseRules": {
    "target":
"com.amazonaws.licensemanager#StringList",
    "traits": {
      "smithy.api#documentation": "<p>License rules. The syntax is #name=value (for example,
#allowedTenancy=EC2-DedicatedHost). The available rules \n    vary by dimension, as follows.</p>\n
<ul>\n    <li>\n        <p>\n            <code>Cores</code> dimension: <code>allowedTenancy</code> |\n
            <code>licenseAffinityToHost</code> |\n            <code>maximumCores</code> |
<code>minimumCores</code>\n        </p>\n        </li>\n        <li>\n            <p>\n                <code>Instances</code> dimension: <code>allowedTenancy</code> |\n                <code>maximumCores</code> |
<code>minimumCores</code> |\n                <code>maximumSockets</code> | <code>minimumSockets</code> |\n                <code>maximumVcpus</code> | <code>minimumVcpus</code>\n            </p>\n        </li>\n
        <li>\n            <p>\n                <code>Sockets</code> dimension: <code>allowedTenancy</code> |\n                <code>licenseAffinityToHost</code> |\n                <code>maximumSockets</code> |
<code>minimumSockets</code>\n            </p>\n        </li>\n        <li>\n            <p>\n                <code>vCPUs</code> dimension: <code>allowedTenancy</code> |
<code>honorVcpuOptimization</code> |\n                <code>maximumVcpus</code> |
<code>minimumVcpus</code>\n            </p>\n        </li>\n    </ul>\n    <p>The unit for
<code>licenseAffinityToHost</code> is days and the range is 1 to 180. The possible \n    values for
<code>allowedTenancy</code> are <code>EC2-Default</code>, <code>EC2-DedicatedHost</code>, and \n
<code>EC2-DedicatedInstance</code>. The possible values for <code>honorVcpuOptimization</code> are \n
<code>True</code> and <code>False</code>.</p>"
    }
  },
  "Tags": {
    "target": "com.amazonaws.licensemanager#TagList",
    "traits": {
      "smithy.api#documentation": "<p>Tags to add to the license configuration.</p>"
    }
  },
  "DisassociateWhenNotFound": {
    "target": "com.amazonaws.licensemanager#BoxBoolean",
    "traits": {
      "smithy.api#documentation": "<p>When true, disassociates a resource when software is
uninstalled.</p>"
    }
  },
  "ProductInformationList": {
    "target": "com.amazonaws.licensemanager#ProductInformationList",
    "traits": {
      "smithy.api#documentation": "<p>Product information.</p>"
    }
  }
}

```



```

    },
    "traits": {
      "smithy.api#input": {}
    }
  },
  "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse":
  {
    "type": "structure",
    "members": {
      "LicenseConfigurationArn": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
      },
      {
        "target": "com.amazonaws.licensemanager#ValidationException"
      }
    ]
  },

```

```

    "traits": {
      "smithy.api#documentation": "<p>Creates a new license conversion task.</p>"
    }
  },
  "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest": {
    "type": "structure",
    "members": {
      "ResourceArn": {

        "target": "com.amazonaws.licensemanager#Arn",
        "traits": {
          "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource you are converting
the license type for.</p>",
          "smithy.api#required": {}
        }
      },
      "SourceLicenseContext": {
        "target": "com.amazonaws.licensemanager#LicenseConversionContext",
        "traits": {
          "smithy.api#documentation": "<p>Information that identifies the license type you are converting
from. \n\n    For the structure of the source license, see <a href=\"https://docs.aws.amazon.com/license-
manager/latest/userguide/conversion-procedures.html#conversion-cli\">Convert a license type using the CLI </a> in
the <i>License Manager User Guide</i>.</p>",
          "smithy.api#required": {}
        }
      },
      "DestinationLicenseContext":
    {
      "target": "com.amazonaws.licensemanager#LicenseConversionContext",
      "traits": {
        "smithy.api#documentation": "<p>Information that identifies the license type you are converting to.
For the structure of the destination license, see <a href=\"https://docs.aws.amazon.com/license-
manager/latest/userguide/conversion-procedures.html#conversion-cli\">Convert a license type using the CLI </a> in
the <i>License Manager User Guide</i>.</p>",
        "smithy.api#required": {}
      }
    }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse": {
      "type": "structure",
      "members": {
        "LicenseConversionTaskId": {
          "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",

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"traits": {
  "smithy.api#documentation": "<p>The ID of the created license type conversion task.</p>"
}
},
"traits": {
  "smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Creates a report generator.</p>"
  }
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest": {

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```

"type": "structure",
"members": {
  "ReportGeneratorName":
  {
    "target": "com.amazonaws.licensemanager#ReportGeneratorName",
    "traits": {
      "smithy.api#documentation": "<p>Name of the report generator.</p>",
      "smithy.api#required": {}
    }
  },
  "Type": {
    "target": "com.amazonaws.licensemanager#ReportTypeList",
    "traits": {
      "smithy.api#documentation": "<p>Type of reports to generate. The following report types an be
generated:</p>\n  <ul>\n    <li>\n      <p>License configuration report - Reports the number and
details of consumed licenses for a license configuration.</p>\n    </li>\n    <li>\n      <p>Resource
report - Reports the tracked licenses and resource consumption for a license configuration.</p>\n    </li>\n
</ul>",
      "smithy.api#required": {}
    }
  },
  "ReportContext": {
    "target": "com.amazonaws.licensemanager#ReportContext",
    "traits": {
      "smithy.api#documentation": "<p>Defines the type of license configuration the report generator
tracks.</p>",
      "smithy.api#required": {}
    }
  },
  "ReportFrequency": {
    "target": "com.amazonaws.licensemanager#ReportFrequency",
    "traits": {
      "smithy.api#documentation": "<p>Frequency by which reports are generated. Reports can be
generated daily, monthly, or weekly.</p>",
      "smithy.api#required": {}
    }
  },
  "ClientToken": {
    "target": "com.amazonaws.licensemanager#ClientRequestToken",
    "traits": {
      "smithy.api#documentation": "<p>Unique,
case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
      "smithy.api#required": {}
    }
  },
  "Description": {
    "target": "com.amazonaws.licensemanager#String",

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```

    "traits": {
      "smithy.api#documentation": "<p>Description of the report generator.</p>"
    }
  },
  "Tags": {
    "target": "com.amazonaws.licensemanager#TagList",
    "traits": {
      "smithy.api#documentation": "<p>Tags to add to the report generator.</p>"
    }
  },
  "traits": {
    "smithy.api#input": {}
  },
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse": {
  "type": "structure",
  "members": {
    "LicenseManagerReportGeneratorArn":
  {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the new report
generator.</p>"
    }
  },
  },
  "traits": {
    "smithy.api#output": {}
  },
},
"com.amazonaws.licensemanager#CreateLicenseRequest": {
  "type": "structure",
  "members": {
    "LicenseName": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>License name.</p>",
        "smithy.api#required": {}
      }
    },
    "ProductName": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Product
name.</p>",
        "smithy.api#required": {}
      }
    }
  }
}

```

```

    },
    "ProductSKU": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Product SKU.</p>",
        "smithy.api#required": {}
      }
    },
    "Issuer": {
      "target": "com.amazonaws.licensemanager#Issuer",
      "traits": {
        "smithy.api#documentation": "<p>License issuer.</p>",
        "smithy.api#required": {}
      }
    },
    "HomeRegion": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Home Region for the license.</p>",
        "smithy.api#required": {}
      }
    }
  },
  "Validity": {
    "target": "com.amazonaws.licensemanager#DatetimeRange",
    "traits": {
      "smithy.api#documentation": "<p>Date and time range during which the license is valid, in ISO8601-
UTC format.</p>",
      "smithy.api#required": {}
    }
  },
  "Entitlements": {
    "target": "com.amazonaws.licensemanager#EntitlementList",
    "traits": {
      "smithy.api#documentation": "<p>License entitlements.</p>",
      "smithy.api#required": {}
    }
  },
  "Beneficiary": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>License beneficiary.</p>",
      "smithy.api#required": {}
    }
  },
  "ConsumptionConfiguration": {
    "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
    "traits": {

```

"smithy.api#documentation": "<p>Configuration for consumption of the license. Choose a provisional configuration for workloads\n running with continuous connectivity. Choose a borrow configuration for workloads with offline\n usage.</p>",

```
    "smithy.api#required": {}
  }
},
"LicenseMetadata": {
  "target": "com.amazonaws.licensemanager#MetadataList",
  "traits": {
    "smithy.api#documentation": "<p>Information about the license.</p>"
  }
},
"ClientToken": {
  "target": "com.amazonaws.licensemanager#ClientToken",
  "traits": {
    "smithy.api#documentation":
"<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
    "smithy.api#required": {}
  }
}
},
"traits": {
  "smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseResponse": {
  "type": "structure",
  "members": {
    "LicenseArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
      }
    },
    "Status": {
      "target": "com.amazonaws.licensemanager#LicenseStatus",
      "traits": {
        "smithy.api#documentation": "<p>License status.</p>"
      }
    },
    "Version": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>License version.</p>"
      }
    }
  }
},
"traits": {
```

```

    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#CreateLicenseVersion": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#CreateLicenseVersionRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#CreateLicenseVersionResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#ConflictException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#RedirectException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Creates a new version of the specified license.</p>"
  }
},
"com.amazonaws.licensemanager#CreateLicenseVersionRequest": {
  "type": "structure",
  "members": {
    "LicenseArn": {
      "target":
"com.amazonaws.licensemanager#Arn",
      "traits": {

```



```

        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
        "smithy.api#required": {}
    }
},
"LicenseName": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
        "smithy.api#documentation": "<p>License name.</p>",
        "smithy.api#required": {}
    }
},
"ProductName": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
        "smithy.api#documentation": "<p>Product name.</p>",
        "smithy.api#required": {}
    }
},
"Issuer": {
    "target": "com.amazonaws.licensemanager#Issuer",
    "traits": {
        "smithy.api#documentation": "<p>License issuer.</p>",
        "smithy.api#required": {}
    }
},
"HomeRegion": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
        "smithy.api#documentation": "<p>Home Region of the license.</p>",
        "smithy.api#required": {}
    }
},
"Validity": {
    "target": "com.amazonaws.licensemanager#DatetimeRange",
    "traits": {
        "smithy.api#documentation": "<p>Date and time range during which the license is valid, in ISO8601-
UTC format.</p>",
        "smithy.api#required": {}
    }
},
"LicenseMetadata": {
    "target": "com.amazonaws.licensemanager#MetadataList",
    "traits": {
        "smithy.api#documentation": "<p>Information about the license.</p>"
    }
},
"Entitlements": {

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```

    "target": "com.amazonaws.licensemanager#EntitlementList",
    "traits": {
      "smithy.api#documentation": "<p>License entitlements.</p>",
      "smithy.api#required": {}
    }
  },
  "ConsumptionConfiguration": {
    "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
    "traits": {
      "smithy.api#documentation": "<p>Configuration for consumption of the license. Choose a provisional configuration for workloads\n      running with continuous connectivity. Choose a borrow configuration for workloads with offline\n      usage.</p>",
      "smithy.api#required": {}
    }
  },
  "Status": {
    "target": "com.amazonaws.licensemanager#LicenseStatus",
    "traits": {
      "smithy.api#documentation": "<p>License status.</p>",
      "smithy.api#required": {}
    }
  },
  "ClientToken": {
    "target": "com.amazonaws.licensemanager#ClientToken",
    "traits": {
      "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
      "smithy.api#required": {}
    }
  },
  "SourceVersion": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Current version of the license.</p>"
    }
  },
  "traits": {
    "smithy.api#input": {}
  },
  "com.amazonaws.licensemanager#CreateLicenseVersionResponse": {
    "type": "structure",
    "members": {
      "LicenseArn": {
        "target": "com.amazonaws.licensemanager#Arn",

```

```

    "traits": {
      "smithy.api#documentation": "<p>License ARN.</p>"
    }
  },
  "Version": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>New version of the license.</p>"
    }
  },
  "Status": {
    "target": "com.amazonaws.licensemanager#LicenseStatus",
    "traits": {
      "smithy.api#documentation": "<p>License status.</p>"
    }
  }
},
"traits": {
  "smithy.api#output":
}
}
},
"com.amazonaws.licensemanager#CreateToken": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#CreateTokenRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#CreateTokenResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#RedirectException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
    }
  ],

```

```

{
  "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
  "target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
  "target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
  "smithy.api#documentation": "<p>Creates a long-lived token.</p>\n      <p>A refresh token is a JWT token used to get an access token. With an access token,\n      you can call AssumeRoleWithWebIdentity to get role credentials that you can use to \n      call License Manager to manage the specified license.</p>"
}
},
"com.amazonaws.licensemanager#CreateTokenRequest": {
  "type": "structure",
  "members": {
    "LicenseArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
{
      "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license. The ARN is mapped to the aud claim of the\n      JWT token.</p>",
      "smithy.api#required": {}
    }
},
    "RoleArns": {
      "target": "com.amazonaws.licensemanager#ArnList",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the IAM roles to embed in the token. \n      License Manager does not check whether the roles are in use.</p>"
      }
},
    "ExpirationInDays": {
      "target": "com.amazonaws.licensemanager#Integer",
      "traits": {
        "smithy.api#documentation": "<p>Token expiration, in days, counted from token creation. The default is 365 days.</p>"
      }
},
    "TokenProperties": {
      "target": "com.amazonaws.licensemanager#MaxSize3StringList",
      "traits": {
        "smithy.api#documentation": "<p>Data specified by the caller to be included in the JWT token. The data is mapped\n      to the amr claim of the JWT token.</p>"
      }
}
}
}

```

```

    },
    "ClientToken": {
      "target": "com.amazonaws.licensemanager#ClientToken",
      "traits": {
        "smithy.api#documentation": "<p>Idempotency token, valid for 10 minutes.</p>",
        "smithy.api#required": {}
      }
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#CreateTokenResponse": {
  "type": "structure",
  "members": {
    "TokenId": {
      "target": "com.amazonaws.licensemanager#String",

      "traits": {
        "smithy.api#documentation": "<p>Token ID.</p>"
      }
    },
    "TokenType": {
      "target": "com.amazonaws.licensemanager#TokenType",
      "traits": {
        "smithy.api#documentation": "<p>Token type.</p>"
      }
    },
    "Token": {
      "target": "com.amazonaws.licensemanager#TokenString",
      "traits": {
        "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#DateTime": {
  "type": "timestamp"
},
"com.amazonaws.licensemanager#DatetimeRange": {
  "type": "structure",
  "members": {
    "Begin": {

```

```

    "target": "com.amazonaws.licensemanager#ISO8601DateTime",
    "traits": {
      "smithy.api#documentation": "<p>Start of the time range.</p>",
      "smithy.api#required": {}
    }
  },
  "End": {
    "target": "com.amazonaws.licensemanager#ISO8601DateTime",
    "traits": {
      "smithy.api#documentation": "<p>End of the time range.</p>"
    }
  }
},
"traits": {
  "smithy.api#documentation": "<p>Describes a time range, in ISO8601-UTC format.</p>"
}
},
"com.amazonaws.licensemanager#DeleteGrant": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#DeleteGrantRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#DeleteGrantResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ]
},

```

```

    "traits": {
      "smithy.api#documentation": "<p>Deletes
the specified grant.</p>"
    }
  },
  "com.amazonaws.licensemanager#DeleteGrantRequest": {
    "type": "structure",
    "members": {
      "GrantArn": {
        "target": "com.amazonaws.licensemanager#Arn",
        "traits": {
          "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
          "smithy.api#required": {}
        }
      },
      "StatusReason": {
        "target": "com.amazonaws.licensemanager#StatusReasonMessage",
        "traits": {
          "smithy.api#documentation": "<p>The Status reason for the delete request.</p>"
        }
      },
      "Version": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Current version of the
grant.</p>",
          "smithy.api#required": {}
        }
      }
    },
    "traits": {
      "smithy.api#input": {}
    }
  },
  "com.amazonaws.licensemanager#DeleteGrantResponse": {
    "type": "structure",
    "members": {
      "GrantArn": {
        "target": "com.amazonaws.licensemanager#Arn",
        "traits": {
          "smithy.api#documentation": "<p>Grant ARN.</p>"
        }
      },
      "Status": {
        "target": "com.amazonaws.licensemanager#GrantStatus",
        "traits": {
          "smithy.api#documentation": "<p>Grant status.</p>"
        }
      }
    }
  }
}

```

```

    },
    "Version": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation":
" <p>Grant version.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#DeleteLicense": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#DeleteLicenseRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#DeleteLicenseResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#ConflictException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    }
  ],
  {
    "target": "com.amazonaws.licensemanager#RateLimitExceededException"
  },
  {
    "target": "com.amazonaws.licensemanager#RedirectException"
  },
  {
    "target": "com.amazonaws.licensemanager#ServerInternalException"
  },
  {
    "target": "com.amazonaws.licensemanager#ValidationException"
  }
],

```



```

    "traits": {
      "smithy.api#documentation": "<p>Deletes the specified license.</p>"
    }
  },
  "com.amazonaws.licensemanager#DeleteLicenseConfiguration": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse"
    },
  },

  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Deletes the specified license configuration.</p>\n    <p>You cannot delete a license configuration that is in use.</p>"
  }
},
"com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest": {
  "type": "structure",
  "members":
{
  "LicenseConfigurationArn": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>ID of the license configuration.</p>",
      "smithy.api#required": {}
    }
  }
},
  "traits": {

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```

    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse": {
  "type": "structure",
  "members": {},
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Deletes the specified report generator.</p>\n    <p>This action deletes the report generator, which stops it from generating future reports.\n    The action cannot be reversed. It has no effect on the previous reports from this generator.</p>"
  }
}

```

```

    }
  },
  "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest": {
    "type": "structure",
    "members": {
      "LicenseManagerReportGeneratorArn": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator to be
deleted.</p>",
          "smithy.api#required": {}
        }
      }
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse": {
  "type": "structure",
  "members": {},
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#DeleteLicenseRequest": {
  "type": "structure",
  "members": {
    "LicenseArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
        "smithy.api#required": {}
      }
    },
    "SourceVersion": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Current version of the license.</p>",
        "smithy.api#required":
      }
    }
  }
},
  "traits": {
    "smithy.api#input": {}
  }
}

```

```

},
"com.amazonaws.licensemanager#DeleteLicenseResponse": {
  "type": "structure",
  "members": {
    "Status": {
      "target": "com.amazonaws.licensemanager#LicenseDeletionStatus",
      "traits": {
        "smithy.api#documentation": "<p>License status.</p>"
      }
    },
    "DeletionDate": {
      "target": "com.amazonaws.licensemanager#ISO8601DateTime",
      "traits": {
        "smithy.api#documentation": "<p>Date when the license is deleted.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#DeleteToken": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#DeleteTokenRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#DeleteTokenResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#RedirectException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    }
  ],

```

```

    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Deletes the specified token. Must be called in the license home
Region.</p>"
  }
},
"com.amazonaws.licensemanager#DeleteTokenRequest": {
  "type": "structure",
  "members": {
    "TokenId": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Token ID.</p>",
        "smithy.api#required": {}
      }
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#DeleteTokenResponse": {
  "type": "structure",
  "members": {},
  "traits": {
    "smithy.api#output": {}
  }
}
},
"com.amazonaws.licensemanager#DigitalSignatureMethod": {
  "type": "enum",
  "members": {
    "JWT_PS384": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "JWT_PS384"
      }
    }
  }
}
},
"com.amazonaws.licensemanager#Entitlement": {
  "type": "structure",
  "members": {
    "Name": {

```

```

    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Entitlement name.</p>",
      "smithy.api#required": {}
    }
  },
  "Value": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Entitlement resource. Use only
if the unit is None.</p>"
    }
  },
  "MaxCount": {
    "target": "com.amazonaws.licensemanager#Long",
    "traits": {
      "smithy.api#documentation": "<p>Maximum entitlement count. Use if the unit is not None.</p>"
    }
  },
  "Overage": {
    "target": "com.amazonaws.licensemanager#BoxBoolean",
    "traits": {
      "smithy.api#documentation": "<p>Indicates whether overages are allowed.</p>"
    }
  },
  "Unit": {
    "target": "com.amazonaws.licensemanager#EntitlementUnit",
    "traits": {
      "smithy.api#documentation": "<p>Entitlement unit.</p>",
      "smithy.api#required": {}
    }
  },
  "AllowCheckIn": {
    "target":
"com.amazonaws.licensemanager#BoxBoolean",
    "traits": {
      "smithy.api#documentation": "<p>Indicates whether check-ins are allowed.</p>"
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Describes a resource entitled for use with a license.</p>"
  }
},
"com.amazonaws.licensemanager#EntitlementData": {
  "type": "structure",
  "members": {
    "Name": {

```

```

    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Entitlement data name.</p>",
      "smithy.api#required": {}
    }
  },
  "Value": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Entitlement
data value.</p>"
    }
  },
  "Unit": {
    "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
    "traits": {
      "smithy.api#documentation": "<p>Entitlement data unit.</p>",
      "smithy.api#required": {}
    }
  }
},
"traits": {
  "smithy.api#documentation": "<p>Data associated with an entitlement resource.</p>"
}
},
"com.amazonaws.licensemanager#EntitlementDataList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#EntitlementData"
  }
},
"com.amazonaws.licensemanager#EntitlementDataUnit": {
  "type": "enum",
  "members": {
    "COUNT": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Count"
      }
    },
    "NONE": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "None"
      }
    }
  },
  "SECONDS": {

```

```
"target": "smithy.api#Unit",
"traits": {
  "smithy.api#enumValue": "Seconds"
}
},
"MICROSECONDS": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Microseconds"
  }
},
"MILLISECONDS": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Milliseconds"
  }
},
"BYTES": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Bytes"
  }
},
"KILOBYTES": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Kilobytes"
  }
},
"MEGABYTES": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Megabytes"
  }
},
"GIGABYTES": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Gigabytes"
  }
},
"TERABYTES": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Terabytes"
  }
},
"BITS":
```



```

{
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Bits"
    }
},
"KILOBITS": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Kilobits"
    }
},
"MEGABITS": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Megabits"
    }
},
"GIGABITS": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Gigabits"
    }
},
"TERABITS": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Terabits"
    }
}
},
"PERCENT": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Percent"
    }
},
"BYTES_PER_SECOND": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Bytes/Second"
    }
},
"KILOBYTES_PER_SECOND": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Kilobytes/Second"
    }
}

```

```

},
"MEGABYTES_PER_SECOND": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Megabytes/Second"
  }
},
"GIGABYTES_PER_SECOND": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Gigabytes/Second"
  }
},
"TERABYTES_PER_SECOND": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Terabytes/Second"
  }
},
"BITS_PER_SECOND": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Bits/Second"
  }
},
"KILOBITS_PER_SECOND": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Kilobits/Second"
  }
},
"MEGABITS_PER_SECOND": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue":
"Megabits/Second"
  }
},
"GIGABITS_PER_SECOND": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Gigabits/Second"
  }
},
"TERABITS_PER_SECOND": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Terabits/Second"
  }
}

```

```

    }
  },
  "COUNT_PER_SECOND": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Count/Second"
    }
  }
},
"com.amazonaws.licensemanager#EntitlementList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#Entitlement"
  }
},
"com.amazonaws.licensemanager#EntitlementNotAllowedException":
{
  "type": "structure",
  "members": {
    "Message": {
      "target": "com.amazonaws.licensemanager#Message"
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>The entitlement is not allowed.</p>",
    "smithy.api#error": "client",
    "smithy.api#httpError": 400
  }
},
"com.amazonaws.licensemanager#EntitlementUnit": {
  "type": "enum",
  "members": {
    "COUNT": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Count"
      }
    },
    "NONE": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "None"
      }
    },
    "SECONDS":
  {
    "target": "smithy.api#Unit",

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```
"traits": {
  "smithy.api#enumValue": "Seconds"
},
},
"MICROSECONDS": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Microseconds"
  }
},
"MILLISECONDS": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Milliseconds"
  }
},
"BYTES": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Bytes"
  }
},
"KILOBYTES": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Kilobytes"
  }
},
"MEGABYTES": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Megabytes"
  }
},
"GIGABYTES": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Gigabytes"
  }
},
"TERABYTES": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Terabytes"
  }
},
"BITS": {
  "target": "smithy.api#Unit",
```

```

    "traits": {
      "smithy.api#enumValue": "Bits"
    }
  },
  "KILOBITS": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Kilobits"
    }
  },
  "MEGABITS": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Megabits"
    }
  },
  "GIGABITS": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Gigabits"
    }
  },
  "TERABITS": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Terabits"
    }
  },
  "PERCENT": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Percent"
    }
  },
  "BYTES_PER_SECOND": {
    "target":
"smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Bytes/Second"
    }
  },
  "KILOBYTES_PER_SECOND": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Kilobytes/Second"
    }
  },

```

```

"MEGABYTES_PER_SECOND": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Megabytes/Second"
  }
},
"GIGABYTES_PER_SECOND": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Gigabytes/Second"
  }
},
"TERABYTES_PER_SECOND": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Terabytes/Second"
  }
},
"BITS_PER_SECOND": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Bits/Second"
  }
},
"KILOBITS_PER_SECOND": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Kilobits/Second"
  }
},
"MEGABITS_PER_SECOND": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Megabits/Second"
  }
},
"GIGABITS_PER_SECOND": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Gigabits/Second"
  }
},
"TERABITS_PER_SECOND": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Terabits/Second"
  }
}

```

```

    }
  },
  "COUNT_PER_SECOND": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Count/Second"
    }
  }
},
"com.amazonaws.licensemanager#EntitlementUsage": {
  "type": "structure",
  "members": {
    "Name": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Entitlement usage name.</p>",
        "smithy.api#required": {}
      }
    },
    "ConsumedValue": {
      "target": "com.amazonaws.licensemanager#String",

      "traits": {
        "smithy.api#documentation": "<p>Resource usage consumed.</p>",
        "smithy.api#required": {}
      }
    },
    "MaxCount": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Maximum entitlement usage count.</p>"
      }
    },
    "Unit": {
      "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
      "traits": {
        "smithy.api#documentation": "<p>Entitlement usage unit.</p>",
        "smithy.api#required": {}
      }
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Usage associated with an entitlement resource.</p>"
  }
},
"com.amazonaws.licensemanager#EntitlementUsageList":

```

```

{
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#EntitlementUsage"
  }
},
"com.amazonaws.licensemanager#ExtendLicenseConsumption": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Extends the expiration date for license consumption.</p>"
  }
},
"com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest": {
  "type": "structure",
  "members": {
    "LicenseConsumptionToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>License consumption token.</p>",

```



```

    "smithy.api#required": {}
  },
  "DryRun": {
    "target": "com.amazonaws.licensemanager#Boolean",
    "traits": {
      "smithy.api#default": false,
      "smithy.api#documentation": "<p>Checks whether you have the required permissions for the action,
without actually making the request. Provides an error response if you do not have the required permissions.</p>"
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse": {
  "type": "structure",
  "members": {
    "LicenseConsumptionToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>License consumption token.</p>"
      }
    },
    "Expiration": {
      "target": "com.amazonaws.licensemanager#ISO8601DateTime",
      "traits": {
        "smithy.api#documentation": "<p>Date and time at which the license consumption expires.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#FailedDependencyException": {
  "type": "structure",
  "members": {
    "Message": {
      "target": "com.amazonaws.licensemanager#Message"
    },
    "ErrorCode": {
      "target": "com.amazonaws.licensemanager#String"
    }
  },
}

```

```

    "traits": {
      "aws.protocols#awsQueryError": {
        "code": "FailedDependency",
        "httpResponseCode": 424
      },
      "smithy.api#documentation":
    }
  },
  "com.amazonaws.licensemanager#Filter": {
    "type": "structure",
    "members": {
      "Name": {
        "target": "com.amazonaws.licensemanager#FilterName",
        "traits": {
          "smithy.api#documentation": "<p>Name of the filter. Filter names are case-sensitive.</p>"
        }
      },
      "Values": {
        "target": "com.amazonaws.licensemanager#FilterValues",
        "traits": {
          "smithy.api#documentation": "<p>The value of the filter, which is case-sensitive. You can only specify one value for the filter.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#documentation": "<p>A filter name and value pair that is used to return more specific results from a\n      describe operation. Filters can be used to match a set of resources by specific criteria,\n      such as tags, attributes, or IDs.</p>"
    }
  },
  "com.amazonaws.licensemanager#FilterLimitExceededException": {
    "type": "structure",
    "members": {
      "Message": {
        "target": "com.amazonaws.licensemanager#Message"
      }
    },
    "traits": {
      "aws.protocols#awsQueryError": {
        "code": "FilterLimitExceeded",
        "httpResponseCode": 400
      },
      "smithy.api#documentation": "<p>The request uses too many filters or too many filter values.</p>",
      "smithy.api#error": "client",

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    "smithy.api#httpError": 400
  }
},
"com.amazonaws.licensemanager#FilterList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#Filter"
  }
},
"com.amazonaws.licensemanager#FilterName": {
  "type": "string"
},
"com.amazonaws.licensemanager#FilterValue": {
  "type": "string"
},
"com.amazonaws.licensemanager#FilterValues": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#FilterValue",
    "traits": {
      "smithy.api#xmlName": "item"
    }
  }
},
"com.amazonaws.licensemanager#Filters": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#Filter",
    "traits": {
      "smithy.api#xmlName": "item"
    }
  }
},
"com.amazonaws.licensemanager#GetAccessToken": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#GetAccessTokenRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#GetAccessTokenResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    }
  ],

```

```

    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Gets a temporary access token to use with
AssumeRoleWithWebIdentity. Access
tokens\n      are valid for one hour.</p>"
  }
},
"com.amazonaws.licensemanager#GetAccessTokenRequest": {
  "type": "structure",
  "members": {
    "Token": {
      "target": "com.amazonaws.licensemanager#TokenString",
      "traits": {
        "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>",
        "smithy.api#required": {}
      }
    },
    "TokenProperties": {
      "target": "com.amazonaws.licensemanager#MaxSize3StringList",
      "traits": {
        "smithy.api#documentation": "<p>Token properties to validate against those present in the JWT
token.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#GetAccessTokenResponse":
{
  "type": "structure",
  "members": {
    "AccessToken": {
      "target": "com.amazonaws.licensemanager#TokenString",
      "traits": {
        "smithy.api#documentation": "<p>Temporary access token.</p>"
      }
    }
  }
}

```

```

    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#GetGrant": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#GetGrantRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#GetGrantResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
      },
      {
        "target": "com.amazonaws.licensemanager#ValidationException"
      }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Gets detailed information about the specified grant.</p>"
    }
  },
  "com.amazonaws.licensemanager#GetGrantRequest": {
    "type": "structure",
    "members": {
      "GrantArn": {
        "target": "com.amazonaws.licensemanager#Arn",
        "traits": {
          "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",

```

```

        "smithy.api#required": {}
    },
    "Version": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
            "smithy.api#documentation": "<p>Grant version.</p>"
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#GetGrantResponse": {
    "type": "structure",
    "members": {
        "Grant": {
            "target": "com.amazonaws.licensemanager#Grant",
            "traits": {
                "smithy.api#documentation": "<p>Grant details.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#GetLicense": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#GetLicenseRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetLicenseResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {

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```

        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
    }
},
{
    "target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
    "smithy.api#documentation": "<p>Gets detailed information about the specified license.</p>"
}
},
"com.amazonaws.licensemanager#GetLicenseConfiguration": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#GetLicenseConfigurationRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetLicenseConfigurationResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Gets detailed information about the specified license configuration.</p>"
    }
},
"com.amazonaws.licensemanager#GetLicenseConfigurationRequest": {
    "type": "structure",
    "members": {
        "LicenseConfigurationArn": {

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```

        "target": "com.amazonaws.licensemanager#String",
        "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
            "smithy.api#required": {}
        }
    },
    "traits":
{
    "smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseConfigurationResponse": {
    "type": "structure",
    "members": {
        "LicenseConfigurationId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Unique ID for the license configuration.</p>"
            }
        },
        "LicenseConfigurationArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
            }
        },
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Name of the license configuration.</p>"
            }
        },
        "Description": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Description of the license configuration.</p>"
            }
        },
        "LicenseCountingType": {
            "target": "com.amazonaws.licensemanager#LicenseCountingType",
            "traits": {
                "smithy.api#documentation": "<p>Dimension for which the licenses are counted.</p>"
            }
        },
        "LicenseRules": {
            "target": "com.amazonaws.licensemanager#StringList",

```



```

    "traits": {
      "smithy.api#documentation": "<p>License rules.</p>"
    }
  },
  "LicenseCount": {
    "target": "com.amazonaws.licensemanager#BoxLong",

    "traits": {
      "smithy.api#documentation": "<p>Number of available licenses.</p>"
    }
  },
  "LicenseCountHardLimit": {
    "target": "com.amazonaws.licensemanager#BoxBoolean",
    "traits": {
      "smithy.api#documentation": "<p>Sets the number of available licenses as a hard limit.</p>"
    }
  },
  "ConsumedLicenses": {
    "target": "com.amazonaws.licensemanager#BoxLong",
    "traits": {
      "smithy.api#documentation": "<p>Number of licenses assigned to resources.</p>"
    }
  },
  "Status": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>License configuration status.</p>"
    }
  }
},
"OwnerAccountId": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Account ID of the owner of the license configuration.</p>"
  }
},
"ConsumedLicenseSummaryList": {
  "target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
  "traits": {
    "smithy.api#documentation": "<p>Summaries of the licenses consumed by resources.</p>"
  }
},
"ManagedResourceSummaryList": {
  "target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
  "traits": {
    "smithy.api#documentation": "<p>Summaries of the managed resources.</p>"
  }
},

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```

"Tags": {
  "target": "com.amazonaws.licensemanager#TagList",
  "traits": {
    "smithy.api#documentation": "<p>Tags for the license configuration.</p>"
  }
},
"ProductInformationList": {
  "target": "com.amazonaws.licensemanager#ProductInformationList",
  "traits": {
    "smithy.api#documentation": "<p>Product information.</p>"
  }
},
"AutomatedDiscoveryInformation": {
  "target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
  "traits": {
    "smithy.api#documentation": "<p>Automated discovery information.</p>"
  }
},
"DisassociateWhenNotFound": {
  "target": "com.amazonaws.licensemanager#BoxBoolean",
  "traits": {
    "smithy.api#documentation": "<p>When
true, disassociates a resource when software is uninstalled.</p>"
  }
},
"traits": {
  "smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTask": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#GetLicenseConversionTaskRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    }
  ],

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    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Gets information about the specified license type conversion task.</p>"
  }
},
"com.amazonaws.licensemanager#GetLicenseConversionTaskRequest": {
  "type": "structure",
  "members": {
    "LicenseConversionTaskId": {
      "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
      "traits": {
        "smithy.api#documentation": "<p>ID of the license type conversion task to retrieve information
on.</p>",
        "smithy.api#required": {}
      }
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#GetLicenseConversionTaskResponse": {
  "type": "structure",
  "members": {
    "LicenseConversionTaskId": {
      "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
      "traits": {
        "smithy.api#documentation": "<p>ID of the license type conversion task.</p>"
      }
    },
    "ResourceArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the resources the license
conversion task is associated with.</p>"
      }
    }
  },
  "traits": {
    "SourceLicenseContext": {
      "target": "com.amazonaws.licensemanager#LicenseConversionContext",
      "traits": {
        "smithy.api#documentation": "<p>Information

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about the license type converted from.</p>"

```
    }
  },
  "DestinationLicenseContext": {
    "target": "com.amazonaws.licensemanager#LicenseConversionContext",
    "traits": {
      "smithy.api#documentation": "<p>Information about the license type converted to.</p>"
    }
  },
  "StatusMessage": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>The status message for the conversion task.</p>"
    }
  },
  "Status": {
    "target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
    "traits": {
      "smithy.api#documentation": "<p>Status of the license type conversion task.</p>"
    }
  },
  "StartTime": {
    "target": "com.amazonaws.licensemanager#DateTime",
    "traits": {
      "smithy.api#documentation": "<p>Time at which the license type conversion task was started .</p>"
    }
  },
  "LicenseConversionTime": {
    "target": "com.amazonaws.licensemanager#DateTime",
    "traits": {
      "smithy.api#documentation": "<p>Amount of time to complete the license type conversion.</p>"
    }
  },
  "EndTime": {
    "target": "com.amazonaws.licensemanager#DateTime",
    "traits": {
      "smithy.api#documentation": "<p>Time at which the license type conversion task was
completed.</p>"
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#GetLicenseManagerReportGenerator":
```

```

{
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
    }
  ],
  {
    "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
  },
  {
    "target": "com.amazonaws.licensemanager#ServerInternalException"
  },
  {
    "target": "com.amazonaws.licensemanager#ValidationException"
  }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Gets information about the specified report generator.</p>"
  }
},
"com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest": {
  "type": "structure",
  "members": {
    "LicenseManagerReportGeneratorArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator.</p>",
        "smithy.api#required":

```

```

{}
  }
}
},
"traits": {
  "smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse": {
  "type": "structure",
  "members": {
    "ReportGenerator": {
      "target": "com.amazonaws.licensemanager#ReportGenerator",
      "traits": {
        "smithy.api#documentation": "<p>A report generator that creates periodic reports about your license configurations.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#GetLicenseRequest": {
  "type": "structure",
  "members": {
    "LicenseArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
        "smithy.api#required": {}
      }
    },
    "Version": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>License version.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#GetLicenseResponse": {
  "type": "structure",
  "members": {

```

```

    "License": {
      "target": "com.amazonaws.licensemanager#License",
      "traits": {
        "smithy.api#documentation": "<p>License details.</p>"
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#GetLicenseUsage": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#GetLicenseUsageRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#GetLicenseUsageResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
      },
      {
        "target": "com.amazonaws.licensemanager#ValidationException"
      }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Gets detailed information about the usage of the specified license.</p>"
    }
  },
  "com.amazonaws.licensemanager#GetLicenseUsageRequest": {
    "type": "structure",
    "members": {

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"LicenseArn": {
  "target": "com.amazonaws.licensemanager#Arn",
  "traits": {
    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
    "smithy.api#required": {}
  }
},
"traits": {
  "smithy.api#input": {}
},
"com.amazonaws.licensemanager#GetLicenseUsageResponse": {
  "type": "structure",
  "members": {
    "LicenseUsage": {
      "target":
"com.amazonaws.licensemanager#LicenseUsage",
      "traits": {
        "smithy.api#documentation": "<p>License usage details.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#GetServiceSettings": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#GetServiceSettingsRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#GetServiceSettingsResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    }
  ]
}

```



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    ],
    "traits": {
      "smithy.api#documentation": "<p>Gets the License Manager settings for the current Region.</p>"
    }
  },
  "com.amazonaws.licensemanager#GetServiceSettingsRequest": {
    "type": "structure",
    "members": {},
    "traits": {
      "smithy.api#input": {}
    }
  },
  "com.amazonaws.licensemanager#GetServiceSettingsResponse": {
    "type": "structure",
    "members": {
      "S3BucketArn": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Regional S3 bucket path for storing reports, license trail event data,
discovery data,\n      and so on.</p>"
        }
      }
    },
    "SnsTopicArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>SNS topic configured to receive notifications from License
Manager.</p>"
      }
    },
    "OrganizationConfiguration": {
      "target": "com.amazonaws.licensemanager#OrganizationConfiguration",
      "traits": {
        "smithy.api#documentation": "<p>Indicates whether Organizations is integrated with License
Manager for\n      cross-account discovery.</p>"
      }
    },
    "EnableCrossAccountsDiscovery": {
      "target": "com.amazonaws.licensemanager#BoxBoolean",
      "traits": {
        "smithy.api#documentation": "<p>Indicates whether cross-account discovery is enabled.</p>"
      }
    }
  },
  "LicenseManagerResourceShareArn": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource share. The License

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Manager management account \n    provides member accounts with access to this share.</p>"
    }
  }
},
"traits": {
  "smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#Grant": {
  "type": "structure",
  "members": {
    "GrantArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
        "smithy.api#required": {}
      }
    },
    "GrantName": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Grant name.</p>",
        "smithy.api#required": {}
      }
    },
    "ParentArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>Parent ARN.</p>",
        "smithy.api#required": {}
      }
    },
    "LicenseArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>License ARN.</p>",
        "smithy.api#required": {}
      }
    },
    "GranteePrincipalArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>The grantee principal ARN.</p>",
        "smithy.api#required": {}
      }
    }
  }
},

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"HomeRegion": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Home Region of the grant.</p>",
    "smithy.api#required": {}
  }
},
"GrantStatus": {
  "target": "com.amazonaws.licensemanager#GrantStatus",
  "traits": {
    "smithy.api#documentation": "<p>Grant status.</p>",
    "smithy.api#required": {}
  }
},
"StatusReason": {
  "target": "com.amazonaws.licensemanager#StatusReasonMessage",
  "traits": {
    "smithy.api#documentation": "<p>Grant status reason.</p>"
  }
},
"Version": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Grant version.</p>",
    "smithy.api#required": {}
  }
},
"GrantedOperations": {
  "target": "com.amazonaws.licensemanager#AllowedOperationList",
  "traits": {
    "smithy.api#documentation": "<p>Granted operations.</p>",
    "smithy.api#required": {}
  }
},
"Options": {
  "target": "com.amazonaws.licensemanager#Options",
  "traits": {
    "smithy.api#documentation": "<p>The options specified for the grant.</p>"
  }
},
"traits": {
  "smithy.api#documentation":
"<p>Describes a grant.</p>"
}
},
"com.amazonaws.licensemanager#GrantList": {
  "type": "list",

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"member": {
  "target": "com.amazonaws.licensemanager#Grant"
}
},
"com.amazonaws.licensemanager#GrantStatus": {
  "type": "enum",
  "members": {
    "PENDING_WORKFLOW": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "PENDING_WORKFLOW"
      }
    },
    "PENDING_ACCEPT": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "PENDING_ACCEPT"
      }
    },
    "REJECTED": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "REJECTED"
      }
    }
  },
  "ACTIVE": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "ACTIVE"
    }
  },
  "FAILED_WORKFLOW": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "FAILED_WORKFLOW"
    }
  },
  "DELETED": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "DELETED"
    }
  },
  "PENDING_DELETE": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "PENDING_DELETE"
    }
  }
}

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    }
  },
  "DISABLED": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "DISABLED"
    }
  },
  "WORKFLOW_COMPLETED": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "WORKFLOW_COMPLETED"
    }
  }
},
"com.amazonaws.licensemanager#GrantedLicense": {
  "type": "structure",
  "members": {
    "LicenseArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
      }
    },
    "LicenseName": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>License name.</p>"
      }
    }
  },
  "ProductName": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Product name.</p>"
    }
  },
  "ProductSKU": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Product SKU.</p>"
    }
  },
  "Issuer": {
    "target": "com.amazonaws.licensemanager#IssuerDetails",
    "traits": {

```

```

    "smithy.api#documentation": "<p>Granted license issuer.</p>"
  }
},
"HomeRegion": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Home Region of the granted license.</p>"
  }
},
"Status": {
  "target": "com.amazonaws.licensemanager#LicenseStatus",
  "traits": {
    "smithy.api#documentation": "<p>Granted license status.</p>"
  }
},
"Validity": {
  "target": "com.amazonaws.licensemanager#DatetimeRange",
  "traits": {
    "smithy.api#documentation": "<p>Date and time range during which the granted license is valid, in ISO8601-UTC format.</p>"
  }
},
"Beneficiary": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Granted license beneficiary.</p>"
  }
},
"Entitlements": {
  "target": "com.amazonaws.licensemanager#EntitlementList",
  "traits": {
    "smithy.api#documentation": "<p>License entitlements.</p>"
  }
},
"ConsumptionConfiguration": {
  "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
  "traits": {
    "smithy.api#documentation": "<p>Configuration for consumption of the license.</p>"
  }
},
"LicenseMetadata": {
  "target": "com.amazonaws.licensemanager#MetadataList",
  "traits": {
    "smithy.api#documentation": "<p>Granted license metadata.</p>"
  }
},
"CreateTime": {

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```

    "target": "com.amazonaws.licensemanager#ISO8601DateTime",
    "traits": {
      "smithy.api#documentation": "<p>Creation time of the granted license.</p>"
    }
  },
  "Version": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Version of the granted license.</p>"
    }
  },
  "ReceivedMetadata": {
    "target": "com.amazonaws.licensemanager#ReceivedMetadata",
    "traits": {
      "smithy.api#documentation": "<p>Granted license received metadata.</p>"
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Describes a license that is granted to a grantee.</p>"
  },
  "com.amazonaws.licensemanager#GrantedLicenseList": {
    "type": "list",
    "member": {
      "target": "com.amazonaws.licensemanager#GrantedLicense"
    }
  },
  "com.amazonaws.licensemanager#ISO8601DateTime":
{
  "type": "string",
  "traits": {
    "smithy.api#length": {
      "min": 0,
      "max": 50
    },
    "smithy.api#pattern": "^(-(?:[1-9][0-9]*)?[0-9]{4})-(1[0-2]|0[1-9])-(3[0-1]|0[1-9]|[1-2][0-9])T(2[0-3]|[0-1][0-9]):([0-5][0-9]):([0-5][0-9])(\\.([0-9]+)?(?:Z|[-+](?:2[ 0-3]|[0-1][0-9]):[0-5][0-9])+$)"
  }
},
  "com.amazonaws.licensemanager#Integer": {
    "type": "integer"
  },
  "com.amazonaws.licensemanager#InvalidParameterValueException": {
    "type": "structure",
    "members": {
      "Message": {

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        "target": "com.amazonaws.licensemanager#Message"
    }
},
"traits": {
    "aws.protocols#awsQueryError": {
        "code": "InvalidParameterValueProvided",
        "httpResponseCode": 400
    },
    "smithy.api#documentation":
"<p>One or more parameter values are not valid.</p>",
    "smithy.api#error": "client",
    "smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#InvalidResourceStateException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "aws.protocols#awsQueryError": {
            "code": "InvalidResourceState",
            "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>License Manager cannot allocate a license to a resource because of its
state. </p>\n    <p>For example, you cannot allocate a license to an instance in the process of shutting\n
down.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},

"com.amazonaws.licensemanager#InventoryFilter": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Name of the filter.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "Condition": {
        "target": "com.amazonaws.licensemanager#InventoryFilterCondition",
        "traits": {
            "smithy.api#documentation": "<p>Condition of the filter.</p>",

```



```

        "smithy.api#required": {}
    },
    "Value": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
            "smithy.api#documentation": "<p>Value of the filter.</p>"
        }
    }
},
"traits": {
    "smithy.api#documentation": "<p>An inventory filter.</p>"
}
},
"com.amazonaws.licensemanager#InventoryFilterCondition": {
    "type": "enum",
    "members": {
        "EQUALS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EQUALS"
            }
        },
        "NOT_EQUALS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "NOT_EQUALS"
            }
        },
        "BEGINS_WITH": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "BEGINS_WITH"
            }
        },
        "CONTAINS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "CONTAINS"
            }
        }
    }
},
"com.amazonaws.licensemanager#InventoryFilterList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#InventoryFilter"
    }
}

```

```

    }
  },
  "com.amazonaws.licensemanager#Issuer": {
    "type": "structure",
    "members": {
      "Name": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Issuer name.</p>",
          "smithy.api#required": {}
        }
      },
      "SignKey": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Asymmetric KMS key from Key Management Service. The KMS
key must have a key usage
of sign and verify, \n      and support the RSASSA-PSS SHA-256 signing algorithm.</p>"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Details about the issuer of a license.</p>"
      }
    }
  },
  "com.amazonaws.licensemanager#IssuerDetails": {
    "type": "structure",
    "members": {
      "Name": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Issuer name.</p>"
        }
      },
      "SignKey": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Asymmetric KMS key from Key Management Service. The KMS
key must have a key usage of sign and verify, \n      and support the RSASSA-PSS SHA-256 signing
algorithm.</p>"
        }
      },
      "KeyFingerprint": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Issuer key fingerprint.</p>"
        }
      }
    }
  }
}

```

```

    },
    "traits": {
      "smithy.api#documentation": "<p>Details associated with the issuer of a license.</p>"
    }
  },
  "com.amazonaws.licensemanager#License": {
    "type": "structure",
    "members": {
      "LicenseArn": {
        "target": "com.amazonaws.licensemanager#Arn",
        "traits": {
          "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
        }
      },
      "LicenseName": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>License name.</p>"
        }
      },
      "ProductName": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Product name.</p>"
        }
      },
      "ProductSKU": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Product SKU.</p>"
        }
      },
      "Issuer": {
        "target": "com.amazonaws.licensemanager#IssuerDetails",
        "traits": {
          "smithy.api#documentation": "<p>License issuer.</p>"
        }
      },
      "HomeRegion": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Home Region of the license.</p>"
        }
      },
      "Status": {
        "target": "com.amazonaws.licensemanager#LicenseStatus",

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    "traits": {
      "smithy.api#documentation": "<p>License status.</p>"
    }
  },
  "Validity": {
    "target": "com.amazonaws.licensemanager#DatetimeRange",
    "traits": {
      "smithy.api#documentation": "<p>Date and time range during which the license is valid, in ISO8601-
UTC format.</p>"
    }
  },
  "Beneficiary": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>License beneficiary.</p>"
    }
  },
  "Entitlements": {

"target": "com.amazonaws.licensemanager#EntitlementList",
    "traits": {
      "smithy.api#documentation": "<p>License entitlements.</p>"
    }
  },
  "ConsumptionConfiguration": {
    "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
    "traits": {
      "smithy.api#documentation": "<p>Configuration for consumption of the license.</p>"
    }
  },
  "LicenseMetadata": {
    "target": "com.amazonaws.licensemanager#MetadataList",
    "traits": {
      "smithy.api#documentation": "<p>License metadata.</p>"
    }
  },
  "CreateTime": {
    "target": "com.amazonaws.licensemanager#ISO8601DateTime",
    "traits": {
      "smithy.api#documentation": "<p>License
creation time.</p>"
    }
  },
  "Version": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>License version.</p>"
    }
  }

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```

    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Software license that is managed in License Manager.</p>"
  }
},
"com.amazonaws.licensemanager#LicenseConfiguration": {
  "type": "structure",
  "members": {
    "LicenseConfigurationId": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Unique ID of the license configuration.</p>"
      }
    },
    "LicenseConfigurationArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
      }
    },
    "Name": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Name of the license configuration.</p>"
      }
    },
    "Description": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Description of the license configuration.</p>"
      }
    },
    "LicenseCountingType": {
      "target": "com.amazonaws.licensemanager#LicenseCountingType",
      "traits": {
        "smithy.api#documentation": "<p>Dimension to use to track the license inventory.</p>"
      }
    },
    "LicenseRules": {
      "target": "com.amazonaws.licensemanager#StringList",
      "traits": {
        "smithy.api#documentation": "<p>License rules.</p>"
      }
    },
    "LicenseCount": {
      "target": "com.amazonaws.licensemanager#BoxLong",
      "traits": {

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    "smithy.api#documentation": "<p>Number of licenses managed by the license configuration.</p>"
  }
},
"LicenseCountHardLimit": {
  "target": "com.amazonaws.licensemanager#BoxBoolean",
  "traits": {
    "smithy.api#documentation": "<p>Number of available licenses as a hard limit.</p>"
  }
},
"DisassociateWhenNotFound": {
  "target": "com.amazonaws.licensemanager#BoxBoolean",
  "traits": {
    "smithy.api#documentation": "<p>When true, disassociates a resource when software is
uninstalled.</p>"
  }
},
"ConsumedLicenses": {
  "target": "com.amazonaws.licensemanager#BoxLong",
  "traits": {
    "smithy.api#documentation": "<p>Number of licenses consumed. </p>"
  }
},
"Status": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Status of the license configuration.</p>"
  }
},
"OwnerAccountId": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Account ID of the license configuration's owner.</p>"
  }
},
},
"ConsumedLicenseSummaryList": {
  "target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
  "traits": {
    "smithy.api#documentation": "<p>Summaries for licenses consumed by various resources.</p>"
  }
},
"ManagedResourceSummaryList": {
  "target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
  "traits": {
    "smithy.api#documentation": "<p>Summaries for managed resources.</p>"
  }
},
"ProductInformationList": {

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    "target": "com.amazonaws.licensemanager#ProductInformationList",
    "traits": {
      "smithy.api#documentation": "<p>Product information.</p>"
    }
  },
  "AutomatedDiscoveryInformation": {
    "target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
    "traits": {
      "smithy.api#documentation": "<p>Automated discovery information.</p>"
    }
  }
},
"traits": {
  "smithy.api#documentation": "<p>A license configuration is an abstraction of a customer license agreement that can be consumed and enforced by License Manager. Components include specifications for the license type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, Dedicated Instance, Dedicated Host, or all of these), host affinity (how long a VM must be associated with a host), and the number of licenses purchased and used.</p>"
}
},
"com.amazonaws.licensemanager#LicenseConfigurationAssociation": {
  "type": "structure",
  "members": {
    "ResourceArn":
  {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
    }
  },
    "ResourceType": {
      "target": "com.amazonaws.licensemanager#ResourceType",
      "traits": {
        "smithy.api#documentation": "<p>Type of server resource.</p>"
      }
    },
    "ResourceOwnerId": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>ID of the Amazon Web Services account that owns the resource consuming licenses.</p>"
      }
    }
  },
  "AssociationTime": {
    "target": "com.amazonaws.licensemanager#DateTime",
    "traits": {

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"smithy.api#documentation": "<p>Time when the license configuration was associated with the resource.</p>"
  }
},
"AmiAssociationScope": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Scope of AMI associations. The possible value is <code>cross-
account</code>.</p>"
  }
},
"traits": {
  "smithy.api#documentation": "<p>Describes an association with a license configuration.</p>"
},
"com.amazonaws.licensemanager#LicenseConfigurationAssociations": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#LicenseConfigurationAssociation"
  }
},
"com.amazonaws.licensemanager#LicenseConfigurationStatus": {
  "type": "enum",
  "members":
{
  "AVAILABLE": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "AVAILABLE"
    }
  },
  "DISABLED": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "DISABLED"
    }
  }
}
},
"com.amazonaws.licensemanager#LicenseConfigurationUsage": {
  "type": "structure",
  "members": {
    "ResourceArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
      }
    },
  },

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"ResourceType": {
  "target": "com.amazonaws.licensemanager#ResourceType",
  "traits":
{
  "smithy.api#documentation": "<p>Type of resource.</p>"
  }
},
"ResourceStatus": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Status of the resource.</p>"
  }
},
"ResourceOwnerId": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>ID of the account that owns the resource.</p>"
  }
},
"AssociationTime": {
  "target": "com.amazonaws.licensemanager#DateTime",
  "traits": {
    "smithy.api#documentation": "<p>Time when the license configuration was initially associated with
the resource.</p>"
  }
},

"ConsumedLicenses": {
  "target": "com.amazonaws.licensemanager#BoxLong",
  "traits": {
    "smithy.api#documentation": "<p>Number of licenses consumed by the resource.</p>"
  }
},
"traits": {
  "smithy.api#documentation": "<p>Details about the usage of a resource associated with a license
configuration.</p>"
},
"com.amazonaws.licensemanager#LicenseConfigurationUsageList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#LicenseConfigurationUsage"
  }
},
"com.amazonaws.licensemanager#LicenseConfigurations": {
  "type": "list",
  "member": {

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    "target": "com.amazonaws.licensemanager#LicenseConfiguration"
  }
},
"com.amazonaws.licensemanager#LicenseConversionContext": {
  "type": "structure",
  "members": {
    "UsageOperation": {
      "target": "com.amazonaws.licensemanager#UsageOperation",
      "traits": {
        "smithy.api#documentation": "<p>The Usage operation value that corresponds to the license type you
are converting your resource from. For more information about which platforms correspond to which usage
operation values see <a href='\"https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/billing-info-
fields.html#billing-info\">Sample data: usage operation by platform\n  </a>\n  </p>"
      }
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Information about a license type conversion task.</p>"
  }
},
"com.amazonaws.licensemanager#LicenseConversionTask": {
  "type": "structure",
  "members": {
    "LicenseConversionTaskId": {
      "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
      "traits": {
        "smithy.api#documentation": "<p>The ID of the license type conversion task.</p>"
      }
    },
    "ResourceArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource associated
with the license type\n  conversion task.</p>"
      }
    },
    "SourceLicenseContext": {
      "target": "com.amazonaws.licensemanager#LicenseConversionContext",
      "traits": {
        "smithy.api#documentation": "<p>Information about the license type this conversion task converted
from.</p>"
      }
    },
    "DestinationLicenseContext": {
      "target":

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```

"com.amazonaws.licensemanager#LicenseConversionContext",
  "traits": {
    "smithy.api#documentation": "<p>Information about the license type this conversion task converted
to.</p>"
  }
},
"Status": {
  "target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
  "traits": {
    "smithy.api#documentation": "<p>The status of the conversion task.</p>"
  }
},
"StatusMessage": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>The status message for the conversion task.</p>"
  }
},
"StartTime": {
  "target": "com.amazonaws.licensemanager#DateTime",
  "traits": {
    "smithy.api#documentation":
"<p>The time the conversion task was started at.</p>"
  }
},
"LicenseConversionTime": {
  "target": "com.amazonaws.licensemanager#DateTime",
  "traits": {
    "smithy.api#documentation": "<p>The time the usage operation value of the resource was
changed.</p>"
  }
},
"EndTime": {
  "target": "com.amazonaws.licensemanager#DateTime",
  "traits": {
    "smithy.api#documentation": "<p>The time the conversion task was completed.</p>"
  }
},
"traits": {
  "smithy.api#documentation": "<p>Information about a license type conversion task.</p>"
}
},
"com.amazonaws.licensemanager#LicenseConversionTaskId": {
  "type": "string",
  "traits": {

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"smithy.api#length": {
  "min": 0,
  "max": 50
},
"smithy.api#pattern": "^\\c-[a-zA-Z0-9]*$"
}
},
"com.amazonaws.licensemanager#LicenseConversionTaskStatus": {
  "type": "enum",
  "members": {
    "IN_PROGRESS": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "IN_PROGRESS"
      }
    },
    "SUCCEEDED": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "SUCCEEDED"
      }
    },
    "FAILED": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "FAILED"
      }
    }
  }
},
"com.amazonaws.licensemanager#LicenseConversionTasks":
{
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#LicenseConversionTask"
  }
},
"com.amazonaws.licensemanager#LicenseCountingType": {
  "type": "enum",
  "members": {
    "VCPU": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "vCPU"
      }
    },
    "INSTANCE": {
      "target": "smithy.api#Unit",

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    "traits": {
      "smithy.api#enumValue": "Instance"
    }
  },
  "CORE": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Core"
    }
  },
  "SOCKET": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Socket"
    }
  }
}
},
"com.amazonaws.licensemanager#LicenseDeletionStatus": {
  "type": "enum",
  "members": {
    "PENDING_DELETE": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "PENDING_DELETE"
      }
    },
    "DELETED": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "DELETED"
      }
    }
  }
},
"com.amazonaws.licensemanager#LicenseList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#License"
  }
},
"com.amazonaws.licensemanager#LicenseOperationFailure": {
  "type": "structure",
  "members": {
    "ResourceArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {

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```

    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
  }
},
"ResourceType": {
  "target": "com.amazonaws.licensemanager#ResourceType",
  "traits": {
    "smithy.api#documentation": "<p>Resource type.</p>"
  }
},
"ErrorMessage": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Error message.</p>"
  }
},
"FailureTime": {
  "target": "com.amazonaws.licensemanager#DateTime",
  "traits": {
    "smithy.api#documentation": "<p>Failure time.</p>"
  }
},
"OperationName": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Name of the operation.</p>"
  }
},
"ResourceOwnerId": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>ID of the Amazon Web Services account that owns the
resource.</p>"
  }
},
"OperationRequestedBy": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>The requester is \"License Manager Automated Discovery\".</p>"
  }
},
"MetadataList": {
  "target": "com.amazonaws.licensemanager#MetadataList",
  "traits": {
    "smithy.api#documentation": "<p>Reserved.</p>"
  }
}
}

```

```

    },
    "traits": {
      "smithy.api#documentation": "<p>Describes the failure of a license operation.</p>"
    }
  },
  "com.amazonaws.licensemanager#LicenseOperationFailureList": {
    "type": "list",
    "member": {
      "target": "com.amazonaws.licensemanager#LicenseOperationFailure"
    }
  },
  "com.amazonaws.licensemanager#LicenseSpecification": {
    "type": "structure",
    "members": {
      "LicenseConfigurationArn": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",

          "smithy.api#required": {}
        }
      },
      "AmiAssociationScope": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Scope of AMI associations. The possible value is <code>cross-
account</code>.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#documentation": "<p>Details for associating a license configuration with a resource.</p>"
    }
  },
  "com.amazonaws.licensemanager#LicenseSpecifications": {
    "type": "list",
    "member": {
      "target": "com.amazonaws.licensemanager#LicenseSpecification"
    }
  },
  "com.amazonaws.licensemanager#LicenseStatus": {
    "type": "enum",
    "members": {
      "AVAILABLE": {
        "target": "smithy.api#Unit",

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"traits": {
  "smithy.api#enumValue": "AVAILABLE"
},
},
"PENDING_AVAILABLE": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "PENDING_AVAILABLE"
  }
},
"DEACTIVATED": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "DEACTIVATED"
  }
},
"SUSPENDED": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "SUSPENDED"
  }
},
"EXPIRED": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "EXPIRED"
  }
},
},
"PENDING_DELETE": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "PENDING_DELETE"
  }
},
"DELETED": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "DELETED"
  }
},
},
"com.amazonaws.licensemanager#LicenseUsage": {
  "type": "structure",
  "members": {
    "EntitlementUsages": {
      "target": "com.amazonaws.licensemanager#EntitlementUsageList",

```



```

    "traits": {
      "smithy.api#documentation": "<p>License entitlement usages.</p>"
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Describes the entitlement usage associated with a license.</p>"
  }
},
"com.amazonaws.licensemanager#LicenseUsageException": {
  "type": "structure",
  "members": {
    "Message": {
      "target": "com.amazonaws.licensemanager#Message"
    }
  },
  "traits": {
    "aws.protocols#awsQueryError": {
      "code": "LicenseUsageFailure",
      "httpResponseCode": 412
    },
    "smithy.api#documentation": "<p>You do not have enough licenses available to support a new resource
launch.</p>",
    "smithy.api#error": "client",
    "smithy.api#httpError": 412
  }
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
    }
  ]
}

```

```

        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
    }
],
"traits": {
    "smithy.api#documentation": "<p>Lists the resource associations for the
specified license configuration.</p>\n    <p>Resource associations need not consume licenses from a license
configuration. \n    For example, an AMI or a stopped instance might not consume a license (depending on \n
the license rules).</p>"
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest": {
    "type": "structure",
    "members": {
        "LicenseConfigurationArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of a license configuration.</p>",
                "smithy.api#required": {}
            }
        },
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results
to return in a single call.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse": {
    "type": "structure",
    "members": {
        "LicenseConfigurationAssociations": {

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```

        "target": "com.amazonaws.licensemanager#LicenseConfigurationAssociations",
        "traits": {
            "smithy.api#documentation": "<p>Information about the associations for the license
configuration.</p>"
        }
    },
    "NextToken": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListDistributedGrants": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListDistributedGrantsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListDistributedGrantsResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ]
}

```

```

    ],
    "traits": {
      "smithy.api#documentation": "<p>Lists the grants distributed for the specified license.</p>"
    }
  },
  "com.amazonaws.licensemanager#ListDistributedGrantsRequest": {
    "type": "structure",
    "members": {
      "GrantArns": {
        "target": "com.amazonaws.licensemanager#ArnList",
        "traits": {
          "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the grants.</p>"
        }
      },
      "Filters": {
        "target": "com.amazonaws.licensemanager#FilterList",
        "traits": {
          "smithy.api#documentation": "<p>Filters to scope the results. The following filters are supported:</p>\n
          <ul>\n
            <li>\n
              <p>\n
                <code>LicenseArn</code>\n
              </p>\n
            </li>\n
            <li>\n
              <p>\n
                <code>GrantStatus</code>\n
              </p>\n
            </li>\n
            <li>\n
              <p>\n
                <code>GranteePrincipalARN</code>\n
              </p>\n
            </li>\n
            <li>\n
              <p>\n
                <code>ProductSKU</code>\n
              </p>\n
            </li>\n
            <li>\n
              <p>\n
                <code>LicenseIssuerName</code>\n
              </p>\n
            </li>\n
          </ul>"
        }
      },
      "NextToken": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Token for the next set of results.</p>"
        }
      },
      "MaxResults": {
        "target": "com.amazonaws.licensemanager#MaxSize100",
        "traits": {
          "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#input": {}
    }
  },
  "com.amazonaws.licensemanager#ListDistributedGrantsResponse": {
    "type": "structure",
    "members": {
      "Grants": {

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```

    "target": "com.amazonaws.licensemanager#GrantList",

"traits": {
    "smithy.api#documentation": "<p>Distributed grant details.</p>"
  }
},
"NextToken": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
  }
}
},
"traits": {
  "smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Lists the license configuration operations that failed.</p>"
  }
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest": {

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```

"type": "structure",
"members": {
  "LicenseConfigurationArn": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Amazon Resource Name of the license configuration.</p>",
      "smithy.api#required": {}
    }
  },
  "MaxResults": {
    "target": "com.amazonaws.licensemanager#BoxInteger",
    "traits": {
      "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
    }
  },
  "NextToken": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Token for the next set of results.</p>"
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse":
{
  "type": "structure",
  "members": {
    "LicenseOperationFailureList": {
      "target": "com.amazonaws.licensemanager#LicenseOperationFailureList",
      "traits": {
        "smithy.api#documentation": "<p>License configuration operations that failed.</p>"
      }
    },
    "NextToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#ListLicenseConfigurations": {

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```

    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest"
    },

    "output": {
      "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
      }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Lists the license configurations
for your account.</p>"
    }
  },
  "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest": {
    "type": "structure",
    "members": {
      "LicenseConfigurationArns": {
        "target": "com.amazonaws.licensemanager#StringList",
        "traits": {
          "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the license
configurations.</p>"
        }
      },
      "MaxResults": {
        "target": "com.amazonaws.licensemanager#BoxInteger",
        "traits": {
          "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
        }
      }
    }
  }
}

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    },
    "NextToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next
set of results.</p>"
      }
    },
    "Filters": {
      "target": "com.amazonaws.licensemanager#Filters",
      "traits": {
        "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
operators\n are supported:</p>\n <ul>\n <li>\n <p>\n
<code>licenseCountingType</code> - The dimension for which licenses are counted.\n Possible values are
<code>vCPU</code> | <code>Instance</code> | <code>Core</code> | <code>Socket</code>.\n Logical
operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n </li>\n <li>\n
<p>\n <code>enforceLicenseCount</code> - A Boolean value that indicates whether hard license
enforcement is used. \n Logical operators are <code>EQUALS</code> |
<code>NOT_EQUALS</code>.</p>\n
</li>\n <li>\n <p>\n <code>usagelimitExceeded</code> - A Boolean value that
indicates whether the available licenses have been exceeded. \n Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n </li>\n </ul>"
      }
    },
    "traits": {
      "smithy.api#input": {}
    }
  },
  "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse": {
    "type": "structure",
    "members": {
      "LicenseConfigurations": {
        "target": "com.amazonaws.licensemanager#LicenseConfigurations",
        "traits": {
          "smithy.api#documentation": "<p>Information about the license configurations.</p>"
        }
      },
      "NextToken": {
        "target": "com.amazonaws.licensemanager#String",

        "traits": {
          "smithy.api#documentation": "<p>Token for the next set of results.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  }
}

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    }
  },
  "com.amazonaws.licensemanager#ListLicenseConversionTasks": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
      }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Lists the license type conversion tasks for your account.</p>"
    }
  },
  "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest": {
    "type": "structure",
    "members": {
      "NextToken": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Token for the next set of results.</p>"
        }
      },
      "MaxResults": {
        "target": "com.amazonaws.licensemanager#BoxInteger",
        "traits": {
          "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
        }
      }
    },
    "Filters": {

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    "target": "com.amazonaws.licensemanager#Filters",
    "traits": {
      "smithy.api#documentation": "<p>\n    Filters to scope the results. Valid filters are
<code>ResourceArns</code> and <code>Status</code>.\n  </p>"
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#ListLicenseConversionTasksResponse": {
  "type": "structure",
  "members": {
    "LicenseConversionTasks": {
      "target": "com.amazonaws.licensemanager#LicenseConversionTasks",
      "traits": {
        "smithy.api#documentation": "<p>Information about the license configuration tasks for your
account.</p>"
      }
    },
    "NextToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#ListLicenseManagerReportGenerators": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target":
"com.amazonaws.licensemanager#AuthorizationException"
    }
  ],

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    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Lists the report generators for your account.</p>"
  }
},
"com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest":
{
  "type": "structure",
  "members": {
    "Filters": {
      "target": "com.amazonaws.licensemanager#FilterList",
      "traits": {
        "smithy.api#documentation": "<p>Filters to scope the results. The following filters are supported:
</p>\n  <ul>\n    <li>\n      <p>\n        <code>LicenseConfigurationArn</code>\n      </li>\n    </ul>"
      }
    },
    "NextToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    },
    "MaxResults": {
      "target": "com.amazonaws.licensemanager#MaxSize100",
      "traits": {
        "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
      }
    }
  }
}

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    },
    "traits": {
      "smithy.api#input": {}
    }
  },
  "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse": {
    "type": "structure",
    "members": {
      "ReportGenerators": {
        "target": "com.amazonaws.licensemanager#ReportGeneratorList",
        "traits": {
          "smithy.api#documentation": "<p>A report generator that creates periodic reports about your license configurations.</p>"
        }
      },
      "NextToken": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Token for the next set of results.</p>"
        }
      }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResource": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    }
  ]
}

```

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    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Describes the license configurations for the specified resource.</p>"
  }
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest": {
  "type": "structure",
  "members": {
    "ResourceArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of a resource that has an
associated license configuration.</p>",
        "smithy.api#required": {}
      }
    },
    "MaxResults": {
      "target": "com.amazonaws.licensemanager#BoxInteger",
      "traits": {
        "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
      }
    },
    "NextToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse": {
  "type": "structure",
  "members": {
    "LicenseSpecifications": {
      "target": "com.amazonaws.licensemanager#LicenseSpecifications",
      "traits": {
        "smithy.api#documentation": "<p>License configurations associated with a resource.</p>"
      }
    },
    "NextToken": {

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        "target": "com.amazonaws.licensemanager#String",
        "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListLicenseVersions": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists all versions of the specified license.</p>"
    }
},
"com.amazonaws.licensemanager#ListLicenseVersionsRequest": {
    "type": "structure",
    "members": {
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                "smithy.api#required": {}
            }
        }
    }
}

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    },
    "NextToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    },
    "MaxResults": {
      "target": "com.amazonaws.licensemanager#MaxSize100",
      "traits": {
        "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#ListLicenseVersionsResponse": {
  "type": "structure",
  "members": {
    "Licenses": {
      "target": "com.amazonaws.licensemanager#LicenseList",
      "traits": {
        "smithy.api#documentation": "<p>License details.</p>"
      }
    }
  },
},
"NextToken": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
  }
},
"traits": {
  "smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListLicenses": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#ListLicensesRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#ListLicensesResponse"
  },
  "errors": [

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    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Lists the licenses for your account.</p>"
  }
},
"com.amazonaws.licensemanager#ListLicensesRequest": {
  "type": "structure",
  "members": {
    "LicenseArns": {
      "target": "com.amazonaws.licensemanager#ArnList",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the licenses.</p>"
      }
    }
  },
  "Filters": {
    "target": "com.amazonaws.licensemanager#FilterList",
    "traits": {
      "smithy.api#documentation": "<p>Filters to scope the results. The following filters are supported:</p>\n
      <ul>\n
        <li>\n
          <p>\n
            <code>Beneficiary</code>\n
          </p>\n
        </li>\n
        <li>\n
          <p>\n
            <code>ProductSKU</code>\n
          </p>\n
        </li>\n
        <li>\n
          <p>\n
            <code>Fingerprint</code>\n
          </p>\n
        </li>\n
        <li>\n
          <p>\n
            <code>Status</code>\n
          </p>\n
        </li>\n
      </ul>"
    }
  },
  "NextToken": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Token

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for the next set of results.</p>"

```
    }
  },
  "MaxResults": {
    "target": "com.amazonaws.licensemanager#MaxSize100",
    "traits": {
      "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
    }
  }
},
"traits": {
  "smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicensesResponse": {
  "type": "structure",
  "members": {
    "Licenses": {
      "target": "com.amazonaws.licensemanager#LicenseList",
      "traits": {
        "smithy.api#documentation": "<p>License details.</p>"
      }
    },
    "NextToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#ListReceivedGrants": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#ListReceivedGrantsRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#ListReceivedGrantsResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
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    "target": "com.amazonaws.licensemanager#AuthorizationException"
  },
  {
    "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
  },
  {
    "target": "com.amazonaws.licensemanager#RateLimitExceededException"
  },
  {
    "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
  },
  {
    "target": "com.amazonaws.licensemanager#ServerInternalException"
  },
  {
    "target": "com.amazonaws.licensemanager#ValidationException"
  }
],
"traits": {
  "smithy.api#documentation": "<p>Lists grants that are received. Received grants are grants created while specifying the\n      recipient as this Amazon Web Services account, your organization, or an organizational unit\n      (OU) to which this member account belongs.</p>"
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsForOrganization": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
    }
  ],

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    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target":
"com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Lists the grants received for all accounts in the organization.</p>"
  }
},
"com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest": {
  "type": "structure",
  "members": {
    "LicenseArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the received license.</p>",
        "smithy.api#required": {}
      }
    },
    "Filters": {
      "target": "com.amazonaws.licensemanager#FilterList",
      "traits": {
        "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n
      <ul>\n
        <li>\n
          <p>\n
            <code>ParentArn</code>\n
          </p>\n
        </li>\n
        <li>\n
          <p>\n
            <code>GranteePrincipalArn</code>\n
          </p>\n
        </li>\n
      </ul>"
      }
    },
    "NextToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    },
    "MaxResults": {
      "target": "com.amazonaws.licensemanager#MaxSize100",
      "traits": {
        "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},

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```

"com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse":
{
  "type": "structure",
  "members": {
    "Grants": {
      "target": "com.amazonaws.licensemanager#GrantList",
      "traits": {
        "smithy.api#documentation": "<p>Lists the grants the organization has received.</p>"
      }
    },
    "NextToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#ListReceivedGrantsRequest": {
  "type": "structure",
  "members": {
    "GrantArns": {
      "target": "com.amazonaws.licensemanager#ArnList",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the grants.</p>"
      }
    },
    "Filters": {
      "target": "com.amazonaws.licensemanager#FilterList",
      "traits": {
        "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n      <ul>\n        <li>\n          <p>\n            <code>ProductSKU</code>\n          </p>\n        </li>\n        <li>\n          <p>\n            <code>LicenseIssuerName</code>\n          </p>\n        </li>\n        <li>\n          <p>\n            <code>LicenseArn</code>\n          </p>\n        </li>\n        <li>\n          <p>\n            <code>GrantStatus</code>\n          </p>\n        </li>\n        <li>\n          <p>\n            <code>GranterAccountId</code>\n          </p>\n        </li>\n      </ul>"
      }
    },
    "NextToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    }
  },
}

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    "MaxResults": {
      "target": "com.amazonaws.licensemanager#MaxSize100",
      "traits": {
        "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
      }
    },
    "traits": {
      "smithy.api#input": {}
    }
  },
  "com.amazonaws.licensemanager#ListReceivedGrantsResponse": {
    "type": "structure",
    "members": {
      "Grants": {
        "target": "com.amazonaws.licensemanager#GrantList",
        "traits": {
          "smithy.api#documentation": "<p>Received grant details.</p>"
        }
      },
      "NextToken": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Token for the next set of results.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#ListReceivedLicenses": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#ListReceivedLicensesRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#ListReceivedLicensesResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      }
    ]
  }
}

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    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Lists received licenses.</p>"
  }
},
"com.amazonaws.licensemanager#ListReceivedLicensesForOrganization":
{
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    }
  ]
}

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        "target": "com.amazonaws.licensemanager#ValidationException"
    }
],
"traits": {
    "smithy.api#documentation": "<p>Lists the licenses received for all accounts in the organization.</p>"
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest": {
    "type": "structure",
    "members": {
        "Filters": {
            "target": "com.amazonaws.licensemanager#FilterList",
            "traits": {
                "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n    <ul>\n        <li>\n            <p>\n                <code>Beneficiary</code>\n            </li>\n            <li>\n                <p>\n                    <code>ProductSKU</code>\n                </p>\n            </li>\n        </ul>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        },
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse": {
    "type": "structure",
    "members": {
        "Licenses": {
            "target": "com.amazonaws.licensemanager#GrantedLicenseList",
            "traits": {
                "smithy.api#documentation": "<p>Lists the licenses the organization has received.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {

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    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
  }
}
},
"traits": {
  "smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesRequest": {
  "type": "structure",
  "members": {
    "LicenseArns": {
      "target": "com.amazonaws.licensemanager#ArnList",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the licenses.</p>"
      }
    }
  },

  "Filters": {
    "target": "com.amazonaws.licensemanager#FilterList",
    "traits": {
      "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n  <ul>\n    <li>\n      <p>\n        <code>ProductSKU</code>\n      </li>\n    <li>\n      <p>\n        <code>Status</code>\n      </li>\n    <li>\n      <p>\n        <code>Fingerprint</code>\n      </li>\n    <li>\n      <p>\n        <code>IssuerName</code>\n      </li>\n    <li>\n      <p>\n        <code>Beneficiary</code>\n      </li>\n  </ul>"
    }
  },
  "NextToken": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Token for the next set of results.</p>"
    }
  },
  "MaxResults": {
    "target": "com.amazonaws.licensemanager#MaxSize100",
    "traits": {
      "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
    }
  }
},
"traits": {
  "smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesResponse": {
  "type": "structure",

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"members": {
  "Licenses": {
    "target": "com.amazonaws.licensemanager#GrantedLicenseList",
    "traits": {
      "smithy.api#documentation": "<p>Received license details.</p>"
    }
  },
  "NextToken": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Token for the next set of results.</p>"
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#ListResourceInventory": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#ListResourceInventoryRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#ListResourceInventoryResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#FailedDependencyException"
    },
    {
      "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    }
  ]
}

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    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Lists resources managed using Systems Manager inventory.</p>"
  }
},
"com.amazonaws.licensemanager#ListResourceInventoryRequest": {
  "type": "structure",
  "members": {
    "MaxResults": {
      "target": "com.amazonaws.licensemanager#BoxInteger",
      "traits": {
        "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
      }
    },
    "NextToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    },
    "Filters": {
      "target": "com.amazonaws.licensemanager#InventoryFilterList",
      "traits": {
        "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical operators are supported:</p>
<ul>
<li>
<p>
<code>account_id</code> - The ID of the Amazon Web Services account that owns the resource.
Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>
</li>
<li>
<p>
<code>application_name</code> - The name of the application.
Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>.</p>
</li>
<li>
<p>
<code>license_included</code> - The type of license included.
Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.\n
Possible values are <code>sql-server-enterprise</code> | \n
<code>sql-server-standard</code> | \n
<code>sql-server-web</code> | \n
<code>windows-server-datacenter</code>.</p>
</li>
<li>
<p>
<code>platform</code> - The platform of the resource.
Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>.</p>
</li>
<li>
<p>
<code>resource_id</code> - The ID of the resource.
Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>
</li>
<li>
<p>
<code>tag:key</code> - The key/value combination of a tag assigned to the resource.
Logical operators are <code>EQUALS</code> (single account) or \n
<code>EQUALS</code> | <code>NOT_EQUALS</code> (cross account).</p>
</li>
</ul>"
      }
    }
  }
},
"traits": {
  "smithy.api#input": {}
}
},

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"com.amazonaws.licensemanager#ListResourceInventoryResponse": {
  "type": "structure",
  "members": {
    "ResourceInventoryList": {
      "target": "com.amazonaws.licensemanager#ResourceInventoryList",
      "traits": {
        "smithy.api#documentation": "<p>Information
about the resources.</p>"
      }
    },
    "NextToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#ListTagsForResource": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#ListTagsForResourceRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#ListTagsForResourceResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Lists the tags for the specified license configuration.</p>"
  }
}

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    }
  },
  "com.amazonaws.licensemanager#ListTagsForResourceRequest": {
    "type": "structure",
    "members": {
      "ResourceArn": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
        }
      }
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#ListTagsForResourceResponse": {
  "type": "structure",
  "members": {
    "Tags": {
      "target": "com.amazonaws.licensemanager#TagList",
      "traits": {
        "smithy.api#documentation": "<p>Information about the tags.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#ListTokens": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#ListTokensRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#ListTokensResponse"
  },
  "errors":
[
  {
    "target": "com.amazonaws.licensemanager#AccessDeniedException"
  },
  {
    "target": "com.amazonaws.licensemanager#AuthorizationException"
  }
]

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    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Lists your tokens.</p>"
  }
},
"com.amazonaws.licensemanager#ListTokensRequest": {
  "type": "structure",
  "members": {
    "TokenIds": {
      "target": "com.amazonaws.licensemanager#StringList",
      "traits": {
        "smithy.api#documentation": "<p>Token IDs.</p>"
      }
    },
    "Filters": {
      "target": "com.amazonaws.licensemanager#FilterList",
      "traits": {
        "smithy.api#documentation": "<p>Filters to scope the results. The following filter is supported:</p>\n
<ul>\n  <li>\n    <p>\n      <code>LicenseArns</code>\n    </p>\n  </li>\n</ul>"
      }
    }
  },
  "NextToken": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Token for the next set of results.</p>"
    }
  },
  "MaxResults": {
    "target": "com.amazonaws.licensemanager#MaxSize100",
    "traits": {
      "smithy.api#documentation":
"<p>Maximum number of results to return in a single call.</p>"
    }
  }
},
"traits": {

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    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#ListTokensResponse": {
  "type": "structure",
  "members": {
    "Tokens": {
      "target": "com.amazonaws.licensemanager#TokenList",
      "traits": {
        "smithy.api#documentation": "<p>Received token details.</p>"
      }
    },
    "NextToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#ListUsageForLicenseConfiguration":
{
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    }
  ],

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    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Lists all license usage records for a license configuration, displaying
license\n    consumption details by resource at a selected point in time. Use this action to audit the\n    current
license consumption for any license inventory and configuration.</p>"
  }
},
"com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest": {
  "type": "structure",
  "members": {
    "LicenseConfigurationArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
        "smithy.api#required": {}
      }
    },
    "MaxResults": {
      "target": "com.amazonaws.licensemanager#BoxInteger",
      "traits": {
        "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
      }
    },
    "NextToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    },
    "Filters": {
      "target": "com.amazonaws.licensemanager#Filters",
      "traits": {
        "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
operators\n    are supported:</p>\n    <ul>\n      <li>\n        <p>\n          <code>resourceArn</code> - The ARN of the license configuration resource.\n          Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n      </li>\n      <li>\n        <p>\n          <code>resourceType</code> - The resource type
(<code>EC2_INSTANCE</code> | <code>EC2_HOST</code> | <code>EC2_AMI</code> |
<code>SYSTEMS_MANAGER_MANAGED_INSTANCE</code>). \n          Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n      </li>\n      <li>\n        <p>\n          <code>resourceAccount</code> - The ID of the account that owns the resource. \n          Logical operators
are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n      </li>\n    </ul>"
      }
    }
  }
}

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    },
    "traits": {
      "smithy.api#input": {}
    }
  },
  "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse": {
    "type": "structure",
    "members": {
      "LicenseConfigurationUsageList": {
        "target": "com.amazonaws.licensemanager#LicenseConfigurationUsageList",
        "traits": {
          "smithy.api#documentation": "<p>Information about the license configurations.</p>"
        }
      },
      "NextToken": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Token for the next set of results.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#Location": {
    "type": "string"
  },
  "com.amazonaws.licensemanager#Long": {
    "type": "long"
  },
  "com.amazonaws.licensemanager#ManagedResourceSummary": {
    "type": "structure",
    "members": {
      "ResourceType":
    {
      "target": "com.amazonaws.licensemanager#ResourceType",
      "traits": {
        "smithy.api#documentation": "<p>Type of resource associated with a license.</p>"
      }
    },
      "AssociationCount": {
        "target": "com.amazonaws.licensemanager#BoxLong",
        "traits": {
          "smithy.api#documentation": "<p>Number of resources associated with licenses.</p>"
        }
      }
    }
  }
}

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    },
    "traits": {
      "smithy.api#documentation": "<p>Summary information about a managed resource.</p>"
    }
  },
  "com.amazonaws.licensemanager#ManagedResourceSummaryList": {
    "type": "list",
    "member": {
      "target": "com.amazonaws.licensemanager#ManagedResourceSummary"
    }
  },
  "com.amazonaws.licensemanager#MaxSize100": {
    "type": "integer",
    "traits": {
      "smithy.api#range": {
        "min": 1,
        "max": 100
      }
    }
  },
  "com.amazonaws.licensemanager#MaxSize3StringList": {
    "type": "list",
    "member": {
      "target": "com.amazonaws.licensemanager#String"
    },
    "traits": {
      "smithy.api#length": {
        "min": 0,
        "max": 3
      }
    }
  },
  "com.amazonaws.licensemanager#Message": {
    "type": "string"
  },
  "com.amazonaws.licensemanager#Metadata": {
    "type": "structure",
    "members": {
      "Name": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>The key name.</p>"
        }
      }
    }
  },
  "Value": {
    "target": "com.amazonaws.licensemanager#String",

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    "traits": {
      "smithy.api#documentation": "<p>The value.</p>"
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Describes key/value pairs.</p>"
  }
},
"com.amazonaws.licensemanager#MetadataList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#Metadata"
  }
},
"com.amazonaws.licensemanager#NoEntitlementsAllowedException": {
  "type": "structure",
  "members": {
    "Message": {
      "target": "com.amazonaws.licensemanager#Message"
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>There are no entitlements found for this license, or the entitlement
maximum count is reached.</p>",
    "smithy.api#error": "client",
    "smithy.api#httpError": 400
  }
},
"com.amazonaws.licensemanager#Options": {
  "type": "structure",
  "members": {
    "ActivationOverrideBehavior": {
      "target": "com.amazonaws.licensemanager#ActivationOverrideBehavior",
      "traits": {
        "smithy.api#documentation": "<p>An activation option for your grant that determines the behavior of
activating a grant.\n    Activation options can only be used with granted licenses sourced from the Amazon Web
Services Marketplace. Additionally, the operation must specify the value of <code>ACTIVE</code> for the\n
<code>Status</code> parameter.</p>\n    <ul>\n      <li>\n        <p>As a license administrator, you can
optionally specify an\n          <code>ActivationOverrideBehavior</code> when activating a grant.</p>\n
      </li>\n      <li>\n        <p>As a grantor, you can optionally specify an\n
<code>ActivationOverrideBehavior</code> when you activate a grant for a grantee\n          account in your
organization.</p>\n      </li>\n      <li>\n        <p>As a grantee, if the grantor creating the distributed
grant doesnt specify an\n          <code>ActivationOverrideBehavior</code>, you can optionally specify one
when you\n          are activating the grant.</p>\n      </li>\n    </ul>\n    <dl>\n
<dt>DISTRIBUTED_GRANTS_ONLY</dt>\n      <dd>\n        <p>Use this value to activate a grant
without replacing any member accounts\n          active grants for the same product.</p>\n      </dd>\n
<dt>ALL_GRANTS_PERMITTED_BY_ISSUER</dt>\n      <dd>\n        <p>Use this value to activate a

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grant and disable other active grants in any\n          member accounts
for the same product. This action will also replace their\n          previously activated grants with this activated
grant.</p>\n          </dd>\n          </dl>"
    }
  }
},
"traits": {
  "smithy.api#documentation": "<p>The options you can specify when you create a new version of a grant,
such as activation\n          override behavior. For more information, see <a
href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-licenses.html\">Granted licenses in
License Manager</a> in the <i>License Manager User Guide</i>.</p>"
  }
},
"com.amazonaws.licensemanager#OrganizationConfiguration": {
  "type": "structure",
  "members": {
    "EnableIntegration": {
      "target": "com.amazonaws.licensemanager#Boolean",
      "traits": {
        "smithy.api#default": false,
        "smithy.api#documentation":
"<p>Enables Organizations integration.</p>",
        "smithy.api#required": {}
      }
    }
  }
},
"traits": {
  "smithy.api#documentation": "<p>Configuration information for Organizations.</p>"
}
},
"com.amazonaws.licensemanager#PrincipalArnList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#Arn"
  },
  "traits": {
    "smithy.api#length": {
      "min": 1,
      "max": 1
    }
  }
},
"com.amazonaws.licensemanager#ProductInformation": {
  "type": "structure",
  "members": {
    "ResourceType": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {

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    "smithy.api#documentation": "<p>Resource type. The
possible values are <code>SSM_MANAGED</code> | <code>RDS</code>.</p>",
    "smithy.api#required": {}
  }
},
"ProductInformationFilterList": {
  "target": "com.amazonaws.licensemanager#ProductInformationFilterList",
  "traits": {
    "smithy.api#documentation": "<p>A Product information filter consists of a
<code>ProductInformationFilterComparator</code> which is a logical operator, a
<code>ProductInformationFilterName</code> which specifies the type of filter being declared, and a
<code>ProductInformationFilterValue</code> that specifies the value to filter on. </p>\n    <p>Accepted values
for <code>ProductInformationFilterName</code> are listed here along with descriptions and valid options for
<code>ProductInformationFilterComparator</code>. </p>\n    <p>The following filters and are supported when
the resource type \n    is <code>SSM_MANAGED</code>:</p>\n
    <ul>\n      <li>\n        <p>\n          <code>Application Name</code> - The name of the
application.\n          Logical operator is <code>EQUALS</code>.</p>\n        </li>\n      <li>\n        <p>\n          <code>Application Publisher</code> - The publisher of the application.\n          Logical
operator is <code>EQUALS</code>.</p>\n        </li>\n      <li>\n        <p>\n          <code>Application Version</code> - The version of the application.\n          Logical operator is
<code>EQUALS</code>.</p>\n        </li>\n      <li>\n        <p>\n          <code>Platform
Name</code> - The name of the platform.\n          Logical operator is <code>EQUALS</code>.</p>\n        </li>\n      <li>\n        <p>\n          <code>Platform Type</code> - The platform type.\n          Logical operator is <code>EQUALS</code>.</p>\n        </li>\n      <li>\n        <p>\n          <code>Tag:key</code> - The key of a tag attached to an
Amazon Web Services resource you wish to exclude from automated discovery. Logical operator is
<code>NOT_EQUALS</code>. The key for your tag must be appended to <code>Tag:</code> following the
example: <code>Tag:name-of-your-key</code>. <code>ProductInformationFilterValue</code> is optional if you
are not using values for the key.\n        </p>\n        </li>\n      <li>\n        <p>\n          <code>AccountId</code> - The 12-digit ID of an Amazon Web Services account you wish to exclude from
automated discovery.\n          Logical operator is <code>NOT_EQUALS</code>.</p>\n        </li>\n      <li>\n        <p>\n          <code>License Included</code> - The type of license included.\n          Logical
operators are <code>EQUALS</code> and <code>NOT_EQUALS</code>.\n          Possible values are:
<code>sql-server-enterprise</code> | \n          <code>sql-server-standard</code> | \n          <code>sql-server-
web</code> | \n          <code>windows-server-datacenter</code>.</p>\n        </li>\n    </ul>\n    <p>The following filters and logical operators are supported when the resource type\n    is
<code>RDS</code>:</p>\n    <ul>\n      <li>\n        <p>\n          <code>Engine Edition</code> -
The edition of the database engine.\n          Logical operator is <code>EQUALS</code>.\n          Possible
values are: <code>oracle-ee</code> | <code>oracle-se</code> | <code>oracle-se1</code> | <code>oracle-
se2</code>.</p>\n        </li>\n      <li>\n        <p>\n          <code>License Pack</code> - The license
pack.\n          Logical operator is <code>EQUALS</code>.\n          Possible values are: <code>data
guard</code> | \n          <code>diagnostic pack sqlt</code> | \n          <code>tuning pack sqlt</code> | \n          <code>ols</code> | \n          <code>olap</code>.</p>\n        </li>\n    </ul>",
    "smithy.api#required": {}
  }
}
},

```

```

    "traits": {
      "smithy.api#documentation": "<p>Describes product information for a license configuration.</p>"
    }
  },
  "com.amazonaws.licensemanager#ProductInformationFilter": {
    "type": "structure",
    "members": {
      "ProductInformationFilterName": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Filter name.</p>",
          "smithy.api#required": {}
        }
      },
      "ProductInformationFilterValue": {
        "target": "com.amazonaws.licensemanager#StringList",

        "traits": {
          "smithy.api#documentation": "<p>Filter value.</p>"
        }
      },
      "ProductInformationFilterComparator": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Logical operator.</p>",
          "smithy.api#required": {}
        }
      }
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Describes product information filters.</p>"
  }
},
"com.amazonaws.licensemanager#ProductInformationFilterList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#ProductInformationFilter"
  }
},
"com.amazonaws.licensemanager#ProductInformationList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#ProductInformation"
  }
},
"com.amazonaws.licensemanager#ProvisionalConfiguration": {
  "type": "structure",
  "members": {

```

```

    "MaxTimeToLiveInMinutes": {
      "target": "com.amazonaws.licensemanager#BoxInteger",
      "traits": {
        "smithy.api#documentation": "<p>Maximum time for the provisional configuration, in minutes.</p>",
        "smithy.api#required": {}
      }
    },
    "traits": {
      "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
    }
  },
  "com.amazonaws.licensemanager#RateLimitExceededException": {
    "type": "structure",
    "members": {
      "Message": {
        "target": "com.amazonaws.licensemanager#Message"
      }
    },
    "traits": {
      "aws.protocols#awsQueryError": {
        "code": "RateLimitExceeded",
        "httpResponseCode": 429
      },
      "smithy.api#documentation": "<p>Too many requests have been submitted. Try again after a brief
wait.</p>",
      "smithy.api#error": "client",
      "smithy.api#httpError": 429
    }
  },
  "com.amazonaws.licensemanager#ReceivedMetadata": {
    "type": "structure",
    "members": {
      "ReceivedStatus": {
        "target": "com.amazonaws.licensemanager#ReceivedStatus",
        "traits": {
          "smithy.api#documentation": "<p>Received status.</p>"
        }
      },
      "ReceivedStatusReason": {
        "target": "com.amazonaws.licensemanager#StatusReasonMessage",
        "traits": {
          "smithy.api#documentation": "<p>Received
status reason.</p>"
        }
      }
    },
    "AllowedOperations": {
      "target": "com.amazonaws.licensemanager#AllowedOperationList",

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    "traits": {
      "smithy.api#documentation": "<p>Allowed operations.</p>"
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Metadata associated with received licenses and grants.</p>"
  }
},
"com.amazonaws.licensemanager#ReceivedStatus": {
  "type": "enum",
  "members": {
    "PENDING_WORKFLOW": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "PENDING_WORKFLOW"
      }
    },
    "PENDING_ACCEPT": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue":
"PENDING_ACCEPT"
      }
    },
    "REJECTED": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "REJECTED"
      }
    },
    "ACTIVE": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "ACTIVE"
      }
    },
    "FAILED_WORKFLOW": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "FAILED_WORKFLOW"
      }
    },
    "DELETED": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "DELETED"
      }
    }
  }
}

```

```

    },
    "DISABLED": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "DISABLED"
      }
    },
    "WORKFLOW_COMPLETED": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "WORKFLOW_COMPLETED"
      }
    }
  }
},
"com.amazonaws.licensemanager#RedirectException": {
  "type": "structure",
  "members": {
    "Location": {
      "target": "com.amazonaws.licensemanager#Location",
      "traits": {
        "smithy.api#httpHeader": "Location"
      }
    },
    "Message": {
      "target": "com.amazonaws.licensemanager#Message"
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>This is not the correct Region for the resource. Try again.</p>",
    "smithy.api#error": "client",
    "smithy.api#httpError": 308
  }
},
"com.amazonaws.licensemanager#RejectGrant": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#RejectGrantRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#RejectGrantResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    }
  ]
}

```



```

    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target":
"com.amazonaws.licensemanager#ResourceLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Rejects the specified grant.</p>"
  }
},
"com.amazonaws.licensemanager#RejectGrantRequest": {
  "type": "structure",
  "members": {
    "GrantArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
        "smithy.api#required": {}
      }
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
}
},
"com.amazonaws.licensemanager#RejectGrantResponse": {
  "type": "structure",
  "members": {
    "GrantArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>Grant ARN.</p>"
      }
    }
  },
  "Status": {

```

```

        "target": "com.amazonaws.licensemanager#GrantStatus",
        "traits": {
            "smithy.api#documentation": "<p>Grant status.</p>"
        }
    },
    "Version": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
            "smithy.api#documentation": "<p>Grant version.</p>"
        }
    }
},
"traits": {
    "smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#RenewType":
{
    "type": "enum",
    "members": {
        "NONE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "None"
            }
        },
        "WEEKLY": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Weekly"
            }
        },
        "MONTHLY": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Monthly"
            }
        }
    }
},
"com.amazonaws.licensemanager#ReportContext": {
    "type": "structure",
    "members": {
        "licenseConfigurationArns": {
            "target": "com.amazonaws.licensemanager#ArnList",
            "traits": {

```

```

"smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration that this
generator reports on.</p>",
  "smithy.api#required": {}
}
},
"traits": {
  "smithy.api#documentation": "<p>Details of the license configuration that this generator reports on.</p>"
}
},
"com.amazonaws.licensemanager#ReportFrequency": {
  "type": "structure",
  "members": {
    "value": {
      "target": "com.amazonaws.licensemanager#Integer",
      "traits": {
        "smithy.api#documentation": "<p>Number of times within the frequency period that a report is
generated. \n    The only supported value is <code>1</code>.</p>"
      }
    },
    "period": {
      "target": "com.amazonaws.licensemanager#ReportFrequencyType",

      "traits": {
        "smithy.api#documentation": "<p>Time period between each report. The period can be daily, weekly,
or monthly.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Details about how frequently reports are generated.</p>"
  }
},
"com.amazonaws.licensemanager#ReportFrequencyType": {
  "type": "enum",
  "members": {
    "DAY": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "DAY"
      }
    },
    "WEEK": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "WEEK"
      }
    }
  },
}

```

```

    "MONTH": {
      "target": "smithy.api#Unit",
      "traits":
    {
      "smithy.api#enumValue": "MONTH"
    }
  }
},
"com.amazonaws.licensemanager#ReportGenerator": {
  "type": "structure",
  "members": {
    "ReportGeneratorName": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Name of the report generator.</p>"
      }
    },
    "ReportType": {
      "target": "com.amazonaws.licensemanager#ReportTypeList",
      "traits": {
        "smithy.api#documentation": "<p>Type of reports that are generated.</p>"
      }
    },
    "ReportContext": {
      "target": "com.amazonaws.licensemanager#ReportContext",
      "traits": {
        "smithy.api#documentation": "<p>License
configuration type for this generator.</p>"
      }
    },
    "ReportFrequency": {
      "target": "com.amazonaws.licensemanager#ReportFrequency",
      "traits": {
        "smithy.api#documentation": "<p>Details about how frequently reports are generated.</p>"
      }
    },
    "LicenseManagerReportGeneratorArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator.</p>"
      }
    },
    "LastRunStatus": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Status of the last report generation attempt.</p>"
      }
    }
  }
}

```

```

    },
    "LastRunFailureReason":
  {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Failure message for the last report generation attempt.</p>"
    }
  },
  "LastReportGenerationTime": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Time the last report was generated at.</p>"
    }
  },
  "ReportCreatorAccount": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>The Amazon Web Services account ID used to create the report
generator.</p>"
    }
  },
  "Description": {
    "target": "com.amazonaws.licensemanager#String",

    "traits": {
      "smithy.api#documentation": "<p>Description of the report generator.</p>"
    }
  },
  "S3Location": {
    "target": "com.amazonaws.licensemanager#S3Location",
    "traits": {
      "smithy.api#documentation": "<p>Details of the S3 bucket that report generator reports are published
to.</p>"
    }
  },
  "CreateTime": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Time the report was created.</p>"
    }
  },
  "Tags": {
    "target": "com.amazonaws.licensemanager#TagList",
    "traits": {
      "smithy.api#documentation": "<p>Tags associated with the report generator.</p>"
    }
  }
}

```

```

}
},
"traits": {
  "smithy.api#documentation": "<p>Describe the details of a report generator.</p>"
}
},
"com.amazonaws.licensemanager#ReportGeneratorList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#ReportGenerator"
  }
},
"com.amazonaws.licensemanager#ReportGeneratorName": {
  "type": "string",
  "traits": {
    "smithy.api#length": {
      "min": 1,
      "max": 100
    }
  }
},
"com.amazonaws.licensemanager#ReportType": {
  "type": "enum",
  "members": {
    "LICENSE_CONFIGURATION_SUMMARY_REPORT": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "LicenseConfigurationSummaryReport"
      }
    }
  }
},
"LICENSE_CONFIGURATION_USAGE_REPORT": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "LicenseConfigurationUsageReport"
  }
}
},
"com.amazonaws.licensemanager#ReportTypeList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#ReportType"
  }
},
"com.amazonaws.licensemanager#ResourceInventory": {
  "type": "structure",
  "members": {

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```

"ResourceId": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>ID of the resource.</p>"
  }
},
"ResourceType": {
  "target": "com.amazonaws.licensemanager#ResourceType",
  "traits": {
    "smithy.api#documentation": "<p>Type of resource.</p>"
  }
},
"ResourceArn": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
  }
},
"Platform": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Platform of the resource.</p>"
  }
},
"PlatformVersion": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Platform version of the resource in the inventory.</p>"
  }
},
"ResourceOwningAccountId": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>ID of the account that owns the resource.</p>"
  }
},
"traits": {
  "smithy.api#documentation": "<p>Details about a resource.</p>"
},
"com.amazonaws.licensemanager#ResourceInventoryList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#ResourceInventory"
  }
}

```

```

},
"com.amazonaws.licensemanager#ResourceLimitExceededException": {
  "type": "structure",
  "members": {
    "Message": {
      "target": "com.amazonaws.licensemanager#Message"
    }
  },
  "traits": {
    "aws.protocols#awsQueryError": {
      "code": "ResourceLimitExceeded",

      "httpResponseCode": 400
    },
    "smithy.api#documentation": "<p>Your resource limits have been exceeded.</p>",
    "smithy.api#error": "client",
    "smithy.api#httpError": 400
  }
},
"com.amazonaws.licensemanager#ResourceNotFoundException": {
  "type": "structure",
  "members": {
    "Message": {
      "target": "com.amazonaws.licensemanager#Message"
    }
  },
  "traits": {
    "aws.protocols#awsQueryError": {
      "code": "InvalidResource.NotFound",
      "httpResponseCode": 400
    },
    "smithy.api#documentation": "<p>The resource cannot be found.</p>",
    "smithy.api#error": "client",
    "smithy.api#httpError": 400
  }
},
"com.amazonaws.licensemanager#ResourceType": {
  "type": "enum",
  "members": {
    "EC2_INSTANCE": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "EC2_INSTANCE"
      }
    },
    "EC2_HOST": {
      "target": "smithy.api#Unit",
      "traits": {

```



```

        "smithy.api#enumValue": "EC2_HOST"
    }
},
"EC2_AMI": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "EC2_AMI"
    }
},
"RDS": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "RDS"
    }
},
"SYSTEMS_MANAGER_MANAGED_INSTANCE": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "SYSTEMS_MANAGER_MANAGED_INSTANCE"
    }
}
},
"com.amazonaws.licensemanager#S3Location": {
    "type": "structure",
    "members": {
        "bucket": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Name of the S3 bucket reports are published to.</p>"
            }
        },
        "keyPrefix": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Prefix of the S3 bucket reports are published to.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Details of the S3 bucket that report generator reports are published to.</p>"
    }
},
"com.amazonaws.licensemanager#ServerInternalException": {
    "type": "structure",
    "members": {
        "Message": {

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```

        "target": "com.amazonaws.licensemanager#Message"
    }
},
"traits": {
    "aws.protocols#awsQueryError": {
        "code": "InternalServerError",
        "httpResponseCode": 500
    },
    "smithy.api#documentation": "<p>The server experienced an internal error. Try again.</p>",
    "smithy.api#error": "server",
    "smithy.api#httpError": 500
}
},
"com.amazonaws.licensemanager#SignedToken": {
    "type": "string",
    "traits": {
        "smithy.api#length": {
            "min": 4096
        }
    }
},
"com.amazonaws.licensemanager#StatusReasonMessage": {
    "type": "string",
    "traits":
{
    "smithy.api#length": {
        "min": 0,
        "max": 400
    },
    "smithy.api#pattern": "^[\\s\\S]+$"
}
},
"com.amazonaws.licensemanager#String": {
    "type": "string"
},
"com.amazonaws.licensemanager#StringList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#String"
    }
},
"com.amazonaws.licensemanager#Tag": {
    "type": "structure",
    "members": {
        "Key": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Tag key.</p>"
            }
        }
    }
}
}

```

```

    }
  },
  "Value": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation":
"<p>Tag value.</p>"
    }
  }
},
"traits": {
  "smithy.api#documentation": "<p>Details about a tag for a license configuration.</p>"
}
},
"com.amazonaws.licensemanager#TagKeyList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#String"
  }
},
"com.amazonaws.licensemanager#TagList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#Tag"
  }
},
"com.amazonaws.licensemanager#TagResource": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#TagResourceRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#TagResourceResponse"
  },
  "errors": [
    {
      "target":
"com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    }
  ]
}

```

```

    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Adds the specified tags to the specified license configuration.</p>"
  }
},
"com.amazonaws.licensemanager#TagResourceRequest": {
  "type": "structure",
  "members": {
    "ResourceArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits":
    {
      "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
      "smithy.api#required": {}
    }
  },
  "Tags": {
    "target": "com.amazonaws.licensemanager#TagList",
    "traits": {
      "smithy.api#documentation": "<p>One or more tags.</p>",
      "smithy.api#required": {}
    }
  }
},
"traits": {
  "smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#TagResourceResponse": {
  "type": "structure",
  "members": {},
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#TokenData": {
  "type": "structure",
  "members": {
    "TokenId": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Token ID.</p>"
      }
    }
  },
},

```

```

"TokenType": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Type of token generated. The supported value is
<code>REFRESH_TOKEN</code>.</p>"
  }
},
"LicenseArn": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
  }
},
"ExpirationTime": {
  "target": "com.amazonaws.licensemanager#ISO8601DateTime",
  "traits": {
    "smithy.api#documentation": "<p>Token expiration time, in ISO8601-UTC
format.</p>"
  }
},
"TokenProperties": {
  "target": "com.amazonaws.licensemanager#MaxSize3StringList",
  "traits": {
    "smithy.api#documentation": "<p>Data specified by the caller.</p>"
  }
},
"RoleArns": {
  "target": "com.amazonaws.licensemanager#ArnList",
  "traits": {
    "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the roles included in the
token.</p>"
  }
},
"Status": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Token status. The possible values are
<code>AVAILABLE</code> and <code>DELETED</code>.</p>"
  }
},
"traits": {
  "smithy.api#documentation": "<p>Describes a token.</p>"
}
},
"com.amazonaws.licensemanager#TokenList": {
  "type": "list",

```

```

    "member": {
      "target": "com.amazonaws.licensemanager#TokenData"
    }
  },
  "com.amazonaws.licensemanager#TokenString": {
    "type": "string",
    "traits": {
      "smithy.api#length": {
        "min": 0,
        "max": 4096
      },
      "smithy.api#pattern": "^\\S+$"
    }
  },
  "com.amazonaws.licensemanager#TokenType": {
    "type": "enum",
    "members": {
      "REFRESH_TOKEN": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "REFRESH_TOKEN"
        }
      }
    }
  },
  "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException":
  {
    "type": "structure",
    "members": {
      "Message": {
        "target": "com.amazonaws.licensemanager#Message"
      }
    },
    "traits": {
      "smithy.api#documentation": "<p>The digital signature method is unsupported. Try your request
again.</p>",
      "smithy.api#error": "client",
      "smithy.api#httpError": 400
    }
  },
  "com.amazonaws.licensemanager#UntagResource": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#UntagResourceRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#UntagResourceResponse"
    }
  },

```

```

"errors": [
  {
    "target": "com.amazonaws.licensemanager#AccessDeniedException"
  },
  {
    "target": "com.amazonaws.licensemanager#AuthorizationException"
  },
  {
    "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
  },
  {
    "target": "com.amazonaws.licensemanager#RateLimitExceededException"
  },
  {
    "target": "com.amazonaws.licensemanager#ServerInternalException"
  }
],
"traits": {
  "smithy.api#documentation": "<p>Removes the specified tags from the specified license
configuration.</p>"
}
},
"com.amazonaws.licensemanager#UntagResourceRequest": {
  "type": "structure",
  "members": {
    "ResourceArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
        "smithy.api#required": {}
      }
    },
    "TagKeys": {
      "target": "com.amazonaws.licensemanager#TagKeyList",
      "traits": {
        "smithy.api#documentation": "<p>Keys identifying the tags to remove.</p>",
        "smithy.api#required": {}
      }
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#UntagResourceResponse": {
  "type": "structure",
  "members": {},

```

```

    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#UpdateLicenseConfiguration": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
      }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Modifies the attributes of an existing license configuration.</p>"
    }
  },
  "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest": {
    "type": "structure",
    "members": {
      "LicenseConfigurationArn": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>",
          "smithy.api#required": {}
        }
      },
    },
  },

```



```

"LicenseConfigurationStatus": {
  "target": "com.amazonaws.licensemanager#LicenseConfigurationStatus",
  "traits": {
    "smithy.api#documentation": "<p>New status of the license configuration.</p>"
  }
},
"LicenseRules": {
  "target": "com.amazonaws.licensemanager#StringList",
  "traits": {
    "smithy.api#documentation": "<p>New license rule. The only rule that you can add after you create a license\n
configuration is licenseAffinityToHost.</p>"
  }
},
"LicenseCount": {
  "target": "com.amazonaws.licensemanager#BoxLong",
  "traits": {
    "smithy.api#documentation": "<p>New number of licenses managed by the license
configuration.</p>"
  }
},
"LicenseCountHardLimit": {
  "target": "com.amazonaws.licensemanager#BoxBoolean",
  "traits": {
    "smithy.api#documentation": "<p>New hard limit of the number of available licenses.</p>"
  }
},
"Name": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>New name
of the license configuration.</p>"
  }
},
"Description": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>New description of the license configuration.</p>"
  }
},
"ProductInformationList": {
  "target": "com.amazonaws.licensemanager#ProductInformationList",
  "traits": {
    "smithy.api#documentation": "<p>New product information.</p>"
  }
},
"DisassociateWhenNotFound": {
  "target": "com.amazonaws.licensemanager#BoxBoolean",

```

```

        "traits": {
            "smithy.api#documentation": "<p>When true, disassociates a resource when software is
uninstalled.</p>"
        }
    },
    "traits":
{
    "smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse": {
    "type": "structure",
    "members": {},
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
    ],

```

```

    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Updates a report generator.</p>\n    <p>After you make changes to a report generator, it starts generating new reports within 60 minutes of being updated.</p>"
  }
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest":
{
  "type": "structure",
  "members": {
    "LicenseManagerReportGeneratorArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator to update.</p>",
        "smithy.api#required": {}
      }
    },
    "ReportGeneratorName": {
      "target": "com.amazonaws.licensemanager#ReportGeneratorName",
      "traits": {
        "smithy.api#documentation": "<p>Name of the report generator.</p>",
        "smithy.api#required": {}
      }
    },
    "Type": {
      "target": "com.amazonaws.licensemanager#ReportTypeList",
      "traits": {
        "smithy.api#documentation":
          "<p>Type of reports to generate. The following report types are supported:</p>\n    <ul>\n      <li>\n        <p>License configuration report - Reports the number and details of consumed licenses for a license configuration.</p>\n      </li>\n      <li>\n        <p>Resource report - Reports the tracked licenses and resource consumption for a license configuration.</p>\n      </li>\n    </ul>",
        "smithy.api#required": {}
      }
    },
    "ReportContext": {
      "target": "com.amazonaws.licensemanager#ReportContext",
      "traits": {
        "smithy.api#documentation": "<p>The report context.</p>",
        "smithy.api#required": {}
      }
    },
    "ReportFrequency": {
      "target": "com.amazonaws.licensemanager#ReportFrequency",

```

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    "traits":
  {
    "smithy.api#documentation": "<p>Frequency by which reports are generated.</p>",
    "smithy.api#required": {}
  }
},
"ClientToken": {
  "target": "com.amazonaws.licensemanager#ClientRequestToken",
  "traits": {
    "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",
    "smithy.api#required": {}
  }
},
"Description": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Description of the report generator.</p>"
  }
}
},
"traits": {
  "smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse":
{
  "type": "structure",
  "members": {},
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    }
  ],

```

```

    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },

    {
      "target": "com.amazonaws.licensemanager#InvalidResourceStateException"
    },
    {
      "target": "com.amazonaws.licensemanager#LicenseUsageException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Adds or removes the specified license configurations for the specified Amazon Web Services resource.</p>\n    <p>You can update the license specifications of AMIs, instances, and hosts.\n    You cannot update the license specifications for launch templates and CloudFormation templates, \n    as they send license configurations to the operation that creates the resource.</p>"
  }
},

"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest": {
  "type": "structure",
  "members": {
    "ResourceArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon Web Services resource.</p>",
        "smithy.api#required": {}
      }
    },
    "AddLicenseSpecifications": {
      "target": "com.amazonaws.licensemanager#LicenseSpecifications",
      "traits": {
        "smithy.api#documentation": "<p>ARNs of the license configurations to add.</p>"
      }
    },
    "RemoveLicenseSpecifications": {
      "target": "com.amazonaws.licensemanager#LicenseSpecifications",
      "traits": {
        "smithy.api#documentation":
"<p>ARNs of the license configurations to remove.</p>"
      }
    }
  }
}

```

```

    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse": {
  "type": "structure",
  "members": {},
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#UpdateServiceSettings": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#UpdateServiceSettingsRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#UpdateServiceSettingsResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Updates License Manager settings for the current Region.</p>"
  }
},
"com.amazonaws.licensemanager#UpdateServiceSettingsRequest": {
  "type": "structure",
  "members": {
    "S3BucketArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {

```

```

    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon S3 bucket where
the License
Manager information is stored.</p>"
  },
  "SnsTopicArn": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon SNS topic used
for License Manager alerts.</p>"
    }
  },
  "OrganizationConfiguration": {
    "target": "com.amazonaws.licensemanager#OrganizationConfiguration",
    "traits": {
      "smithy.api#documentation": "<p>Enables integration with Organizations for cross-account
discovery.</p>"
    }
  },
  "EnableCrossAccountsDiscovery": {
    "target": "com.amazonaws.licensemanager#BoxBoolean",
    "traits": {
      "smithy.api#documentation": "<p>Activates cross-account discovery.</p>"
    }
  }
},
"traits": {
  "smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateServiceSettingsResponse": {
  "type": "structure",
  "members": {},
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#UsageOperation": {
  "type": "string",
  "traits": {
    "smithy.api#length": {
      "min": 0,
      "max": 50
    }
  }
},
"com.amazonaws.licensemanager#ValidationException": {

```

```

    "type": "structure",
    "members": {
      "Message": {
        "target": "com.amazonaws.licensemanager#Message"
      }
    },
    "traits": {
      "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",

      "smithy.api#error": "client",
      "smithy.api#httpError": 400
    }
  }
}
}
}

```

## 1.246 distro 1.8.0

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- \* <https://github.com/asottile>
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## 1.250 jaraco.context 5.3.0

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# 1.252 python 3.11.9-r0

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Python was created in the early 1990s by Guido van Rossum at Stichting Mathematisch Centrum (CWI, see <https://www.cwi.nl>) in the Netherlands as a successor of a language called ABC. Guido remains Python's principal author, although it includes many contributions from others.

In 1995, Guido continued his work on Python at the Corporation for National Research Initiatives (CNRI, see <https://www.cnri.reston.va.us>) in Reston, Virginia where he released several versions of the software.

In May 2000, Guido and the Python core development team moved to BeOpen.com to form the BeOpen PythonLabs team. In October of the same year, the PythonLabs team moved to Digital Creations, which became Zope Corporation. In 2001, the Python Software Foundation (PSF, see <https://www.python.org/psf/>) was formed, a non-profit organization created specifically to own Python-related Intellectual Property. Zope Corporation was a sponsoring member of the PSF.

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1.3 thru 1.5.2	1.2	1995-1999	CNRI	yes
1.6	1.5.2	2000	CNRI	no
2.0	1.6	2000	BeOpen.com	no
1.6.1	1.6	2001	CNRI	yes (2)
2.1	2.0+1.6.1	2001	PSF	no
2.0.1	2.0+1.6.1	2001	PSF	yes

2.1.1	2.1+2.0.1	2001	PSF	yes
2.1.2	2.1.1	2002	PSF	yes
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Python was created in the early 1990s by Guido van Rossum at Stichting Mathematisch Centrum (CWI, see <https://www.cwi.nl>) in the Netherlands as a successor of a language called ABC. Guido remains Python's principal author, although it includes many contributions from others.

In 1995, Guido continued his work on Python at the Corporation for National Research Initiatives (CNRI, see <https://www.cnri.reston.va.us>) in Reston, Virginia where he released several versions of the software.

In May 2000, Guido and the Python core development team moved to BeOpen.com to form the BeOpen PythonLabs team. In October of the same year, the PythonLabs team moved to Digital Creations, which became Zope Corporation. In 2001, the Python Software Foundation (PSF, see <https://www.python.org/psf/>) was formed, a non-profit organization created specifically to own Python-related Intellectual Property. Zope Corporation was a sponsoring member of the PSF.

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1.6	1.5.2	2000	CNRI	no
2.0	1.6	2000	BeOpen.com	no
1.6.1	1.6	2001	CNRI	yes (2)
2.1	2.0+1.6.1	2001	PSF	no
2.0.1	2.0+1.6.1	2001	PSF	yes
2.1.1	2.1+2.0.1	2001	PSF	yes

2.1.2	2.1.1	2002	PSF	yes
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In 1995, Guido continued his work on Python at the Corporation for National Research Initiatives (CNRI, see <https://www.cnri.reston.va.us>) in Reston, Virginia where he released several versions of the software.

In May 2000, Guido and the Python core development team moved to BeOpen.com to form the BeOpen PythonLabs team. In October of the same year, the PythonLabs team moved to Digital Creations, which became Zope Corporation. In 2001, the Python Software Foundation (PSF, see <https://www.python.org/psf/>) was formed, a non-profit organization created specifically to own Python-related Intellectual Property. Zope Corporation was a sponsoring member of the PSF.

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2.0	1.6	2000	BeOpen.com	no
1.6.1	1.6	2001	CNRI	yes (2)
2.1	2.0+1.6.1	2001	PSF	no
2.0.1	2.0+1.6.1	2001	PSF	yes
2.1.1	2.1+2.0.1	2001	PSF	yes

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Python was created in the early 1990s by Guido van Rossum at Stichting Mathematisch Centrum (CWI, see <https://www.cwi.nl>) in the Netherlands as a successor of a language called ABC. Guido remains Python's principal author, although it includes many contributions from others.

In 1995, Guido continued his work on Python at the Corporation for National Research Initiatives (CNRI, see <https://www.cnri.reston.va.us>) in Reston, Virginia where he released several versions of the software.

In May 2000, Guido and the Python core development team moved to BeOpen.com to form the BeOpen PythonLabs team. In October of the same year, the PythonLabs team moved to Digital Creations, which became Zope Corporation. In 2001, the Python Software Foundation (PSF, see <https://www.python.org/psf/>) was formed, a non-profit organization created specifically to own Python-related Intellectual Property. Zope Corporation was a sponsoring member of the PSF.

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0.9.0 thru 1.2		1991-1995	CWI	yes
1.3 thru 1.5.2	1.2	1995-1999	CNRI	yes
1.6	1.5.2	2000	CNRI	no
2.0	1.6	2000	BeOpen.com	no
1.6.1	1.6	2001	CNRI	yes (2)
2.1	2.0+1.6.1	2001	PSF	no
2.0.1	2.0+1.6.1	2001	PSF	yes
2.1.1	2.1+2.0.1	2001	PSF	yes

2.1.2	2.1.1	2002	PSF	yes
2.1.3	2.1.2	2002	PSF	yes
2.2 and above	2.1.1	2001-now	PSF	yes

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# 1.259 ca-certificates-bundle 20240226-r0

## 1.259.1 Available under license :

No license file was found, but licenses were detected in source scan.

```
#!/usr/bin/env perl
# *****
# *
# * Project      _ _ _ _ _
# *            _||| _\|
# *           / _||| |)
# *          |(_||| _<|_
# *          \_|||/| \_|||
# *
# * Copyright (C) 1998 - 2020, Daniel Stenberg, <daniel@haxx.se>, et al.
# *
# * This software is licensed as described in the file COPYING, which
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# *
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# * This software is distributed on an "AS IS" basis, WITHOUT
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# *
# *****
# This Perl script creates a fresh ca-bundle.crt file for use with libcurl.
# It downloads certdata.txt from Mozilla's source tree (see URL below),
# then parses certdata.txt and extracts CA Root Certificates into PEM format.
# These are then processed with the OpenSSL commandline tool to produce the
# final ca-bundle.crt file.
# The script is based on the parse-certs script written by Roland Krikava.
# This Perl script works on almost any platform since its only external
# dependency is the OpenSSL commandline tool for optional text listing.
# Hacked by Guenter Knauf.
#
use Encode;
use Getopt::Std;
use MIME::Base64;
use strict;
use warnings;
use vars qw($opt_b $opt_d $opt_f $opt_h $opt_i $opt_k $opt_l $opt_m $opt_n $opt_p $opt_q $opt_s $opt_t $opt_u
$opt_v $opt_w);
use List::Util;
use Text::Wrap;
```

```

use Time::Local;
my $MOD_SHA = "Digest::SHA";
eval "require
$MOD_SHA";
if ($@) {
$MOD_SHA = "Digest::SHA::PurePerl";
eval "require $MOD_SHA";
}
eval "require LWP::UserAgent";

my %urls = (
'nss' =>
'https://hg.mozilla.org/projects/nss/raw-file/default/lib/ckfw/builtins/certdata.txt',
'central' =>
'https://hg.mozilla.org/mozilla-central/raw-file/default/security/nss/lib/ckfw/builtins/certdata.txt',
'beta' =>
'https://hg.mozilla.org/releases/mozilla-beta/raw-file/default/security/nss/lib/ckfw/builtins/certdata.txt',
'release' =>
'https://hg.mozilla.org/releases/mozilla-release/raw-file/default/security/nss/lib/ckfw/builtins/certdata.txt',
);

$opt_d = 'release';

# If the OpenSSL commandline is not in search path you can configure it here!
my $openssl = 'openssl';

my $version = '1.27';

$opt_w = 76; # default base64 encoded lines length

# default cert types to include in the output (default is to include CAs which may issue SSL server certs)
my $default_mozilla_trust_purposes = "SERVER_AUTH";
my $default_mozilla_trust_levels
= "TRUSTED_DELEGATOR";
$opt_p = $default_mozilla_trust_purposes . ":" . $default_mozilla_trust_levels;

my @valid_mozilla_trust_purposes = (
"DIGITAL_SIGNATURE",
"NON_REPUDIATION",
"KEY_ENCIPHERMENT",
"DATA_ENCIPHERMENT",
"KEY_AGREEMENT",
"KEY_CERT_SIGN",
"CRL_SIGN",
"SERVER_AUTH",
"CLIENT_AUTH",
"CODE_SIGNING",
"EMAIL_PROTECTION",

```

```

"IPSEC_END_SYSTEM",
"IPSEC_TUNNEL",
"IPSEC_USER",
"TIME_STAMPING",
"STEP_UP_APPROVED"
);

my @valid_mozilla_trust_levels = (
"TRUSTED_DELEGATOR", # CAs
"NOT_TRUSTED",      # Don't trust these certs.
"MUST_VERIFY_TRUST", # This explicitly tells us that it ISN'T a CA but is otherwise ok. In other words, this
                    # should tell the app to ignore any other sources that claim this is a CA.
"TRUSTED"           # This cert is trusted, but only for itself and not for delegates (i.e. it is not a CA).
);

my $default_signature_algorithms = $opt_s = "MD5";

my @valid_signature_algorithms = (
"MD5",
"SHA1",
"SHA256",
"SHA384",
"SHA512"
);

$0 =~ s@.*(/\@;
$Getopt::Std::STANDARD_HELP_VERSION = 1;
getopts('bd:fhiklmnp:qs:tuvw:');

if(!defined($opt_d)) {
    # to make plain "-d" use not cause warnings, and actually still work
    $opt_d = 'release';
}

# Use predefined URL or else custom URL specified on command line.
my $url;
if(defined($urls{$opt_d})) {
    $url = $urls{$opt_d};
    if(!$opt_k && $url !~ /^https:\//i) {
        die "The URL for '$opt_d' is not HTTPS. Use -k to override (insecure).\n";
    }
}
else {
    $url = $opt_d;
}

my $curl = `curl -V`;

```

```

if ($opt_i) {
    print ("=" x 78 . "\n");
    print "Script Version      : $version\n";
    print "Perl Version          : $]\n";
    print "Operating System Name    : $^O\n";
    print "Getopt::Std.pm Version     : ${Getopt::Std::VERSION}\n";
    print "Encode::Encoding.pm Version : ${Encode::Encoding::VERSION}\n";
    print "MIME::Base64.pm Version    : ${MIME::Base64::VERSION}\n";
    print "LWP::UserAgent.pm
Version      : ${LWP::UserAgent::VERSION}\n" if($LWP::UserAgent::VERSION);
    print "LWP.pm Version      : ${LWP::VERSION}\n" if($LWP::VERSION);
    print "Digest::SHA.pm Version      : ${Digest::SHA::VERSION}\n" if ($Digest::SHA::VERSION);
    print "Digest::SHA::PurePerl.pm Version : ${Digest::SHA::PurePerl::VERSION}\n" if
($Digest::SHA::PurePerl::VERSION);
    print ("=" x 78 . "\n");
}

```

```

sub warning_message() {
    if ( $opt_d =~ m/^risk$/i ) { # Long Form Warning and Exit
        print "Warning: Use of this script may pose some risk:\n";
        print "\n";
        print " 1) If you use HTTP URLs they are subject to a man in the middle attack\n";
        print " 2) Default to 'release', but more recent updates may be found in other trees\n";
        print " 3) certdata.txt file format may change, lag time to update this script\n";
        print " 4) Generally unwise to blindly trust CAs without manual review & verification\n";
        print " 5) Mozilla apps use additional security
checks aren't represented in certdata\n";
        print " 6) Use of this script will make a security engineer grind his teeth and\n";
        print "    swear at you. ;)\n";
        exit;
    } else { # Short Form Warning
        print "Warning: Use of this script may pose some risk, -d risk for more details.\n";
    }
}

```

```

sub HELP_MESSAGE() {
    print "Usage:\t${0} [-b] [-d<certdata>] [-f] [-i] [-k] [-l] [-n] [-p<purposes:levels>] [-q] [-s<algorithms>] [-t] [-u] [-v] [-w<l>] [<outputfile>]\n";
    print "\t-b\tbackup an existing version of ca-bundle.crt\n";
    print "\t-d\tspecify Mozilla tree to pull certdata.txt or custom URL\n";
    print "\t\t Valid names are:\n";
    print "\t\t ", join( ", ", map { ( $_ =~ m/$opt_d/ ) ? "$_ (default)" : "$_" } sort keys %urls ), "\n";
    print "\t-f\tforce rebuild even if certdata.txt is current\n";
    print "\t-i\tprint version info about used modules\n";
    print "\t-k\tallow URLs other than HTTPS, enable HTTP fallback (insecure)\n";
    print "\t-l\tprint license info
about certdata.txt\n";
    print "\t-m\tinclude meta data in output\n";
}

```

```

print "\t-n\tno download of certdata.txt (to use existing)\n";
print wrap("\t", "\t", "-p\tnlist of Mozilla trust purposes and levels for certificates to include in output. Takes the
form of a comma separated list of purposes, a colon, and a comma separated list of levels. (default:
$default_mozilla_trust_purposes:$default_mozilla_trust_levels)", "\n");
print "\t Valid purposes are:\n";
print wrap("\t ", "\t ", join( " ", "ALL", @valid_mozilla_trust_purposes ) ), "\n";
print "\t Valid levels are:\n";
print wrap("\t ", "\t ", join( " ", "ALL", @valid_mozilla_trust_levels ) ), "\n";
print "\t-q\the really quiet (no progress output at all)\n";
print wrap("\t", "\t", "-s\tncomma separated list of certificate signatures/ hashes to output in plain text mode. (default:
$default_signature_algorithms)\n");
print "\t Valid signature algorithms are:\n";
print wrap("\t ", "\t ",
    ", join( " ", "ALL", @valid_signature_algorithms ) ), "\n";
print "\t-t\tninclude plain text listing of certificates\n";
print "\t-u\tnunlink (remove) certdata.txt after processing\n";
print "\t-v\the verbose and print out processed CAs\n";
print "\t-w <l>\tnwrap base64 output lines after <l> chars (default: ${opt_w})\n";
exit;
}

sub VERSION_MESSAGE() {
    print "${0} version ${version} running Perl ${} on ${^O}\n";
}

warning_message() unless ($opt_q || $url =~ m/^(ht|f)tps:/i);
HELP_MESSAGE() if ($opt_h);

sub report($@) {
    my $output = shift;

    print STDERR $output . "\n" unless $opt_q;
}

sub is_in_list($@) {
    my $target = shift;

    return defined(List::Util::first { $target eq $_ } @_);
}

# Parses $param_string as a case insensitive comma separated list with optional whitespace
# validates that only allowed parameters are supplied
sub parse_csv_param($$@) {
    my $description = shift;
    my $param_string = shift;
    my @valid_values = @_;

    my @values = map {

```

```

    s/^\s+//; # strip leading spaces
    s/\s+$//; # strip trailing spaces
    uc $_     # return the modified string as upper case
} split( ',', $param_string );

# Find all values which are not in the list of valid values or "ALL"
my @invalid = grep { !is_in_list($_,"ALL",@valid_values) } @values;

if ( scalar(@invalid) > 0 ) {
    # Tell the user which parameters were invalid and print the standard help message which will exit
    print "Error: Invalid ", $description, scalar(@invalid) == 1 ? " : " : "s: ", join( ", ", map { "\"$_\""} @invalid ),
    "\n";
    HELP_MESSAGE();
}

@values = @valid_values if ( is_in_list("ALL",@values) );

return @values;
}

sub sha256 {
    my $result;
    if ($Digest::SHA::VERSION || $Digest::SHA::PurePerl::VERSION) {
        open(FILE, $_[0]) or die "Can't open '$_[0]': $!";
        binmode(FILE);
        $result = $MOD_SHA->new(256)->addfile(*FILE)->hexdigest;
        close(FILE);
    } else {
        # Use OpenSSL command if Perl Digest::SHA modules not available
        $result = `"$openssl" dgst -r -sha256 "$_[0]"`;
        $result =~ s/^\s+([0-9a-f]{64}) .+$/1/is;
    }
    return $result;
}

sub oldhash {
    my $hash = "";
    open(C, "<$_[0]") || return 0;
    while(<C>) {
        chomp;
        if($_ =~ /^#\s# SHA256: (.*)/) {
            $hash = $1;
            last;
        }
    }
    close(C);
    return $hash;
}

```

```

}

if ( $opt_p !~ m/;/ ) {
  print "Error: Mozilla trust identifier list must include both purposes and levels\n";
  HELP_MESSAGE();
}

(my $included_mozilla_trust_purposes_string, my $included_mozilla_trust_levels_string) = split( ':', $opt_p );
my @included_mozilla_trust_purposes = parse_csv_param( "trust purpose",
$included_mozilla_trust_purposes_string, @valid_mozilla_trust_purposes );
my @included_mozilla_trust_levels = parse_csv_param( "trust level", $included_mozilla_trust_levels_string,
@valid_mozilla_trust_levels );

my @included_signature_algorithms = parse_csv_param( "signature algorithm", $opt_s,
@valid_signature_algorithms );

sub should_output_cert(%) {
  my
  %trust_purposes_by_level = @_;

  foreach my $level (@included_mozilla_trust_levels) {
    # for each level we want to output, see if any of our desired purposes are included
    return 1 if ( defined( List::Util::first { is_in_list( $_, @included_mozilla_trust_purposes ) }
@{ $trust_purposes_by_level{ $level } } ) );
  }

  return 0;
}

my $crt = $ARGV[0] || 'ca-bundle.crt';
(my $txt = $url) =~ s@(.*|/?.*)*@ @g;

my $stdout = $crt eq '-';
my $resp;
my $fetched;

my $oldhash = oldhash($crt);

report "SHA256 of old file: $oldhash";

if(!$opt_n) {
  report "Downloading $txt ...";

  # If we have an HTTPS URL then use curl
  if($url =~ /^https:\//i) {
    if($curl) {
      if($curl =~ /^Protocols:.* https( |$)/m) {
        report "Get certdata with curl!";
      }
    }
  }
}

```

```

my $proto = !$opt_k ? "--proto=https" : "";
my $quiet = $opt_q ? "-s" : "";
my @out = `curl -w % {response_code} $proto $quiet -o "$txt" "$url"`;
if(! $? && @out && $out[0] == 200) {
    $fetched = 1;
    report "Downloaded $txt";
}
else {
    report "Failed downloading via HTTPS with curl";
    if(-e $txt && !unlink($txt)) {
        report "Failed to remove '$txt': $!";
    }
}
}
else {
    report "curl lacks https support";
}
}
else {
    report "curl not found";
}
}

# If nothing was fetched then use LWP
if(!$fetched) {
    if($url =~ /^https:\//i) {
        report "Falling back to HTTP";
        $url =~ s/^https:\//http:\//i;
    }
    if(!$opt_k) {
        report "URLs other than HTTPS are disabled by default, to enable use -k";
        exit 1;
    }
    report "Get certdata with LWP!";
    if(!defined(${LWP::UserAgent::VERSION})) {
        report "LWP is not available (LWP::UserAgent not found)";
        exit 1;
    }
    my $ua = new LWP::UserAgent(agent => "$0/$version");
    $ua->env_proxy();
    $resp = $ua->mirror($url, $txt);
    if($resp && $resp->code eq '304') {
        report "Not modified";
        exit 0 if -e $crt && !$opt_f;
    }
    else {
        $fetched = 1;
        report "Downloaded $txt";
    }
}

```



```

}
if(!$resp || $resp->code !~ /^(?:200|304)$/) {
    report "Unable to download latest data: "
        . ($resp? $resp->code . ' - ' . $resp->message : "LWP failed");
    exit 1 if -e $crt || ! -r $txt;
}
}
}

my $filedate = $resp ? $resp->last_modified : (stat($txt))[9];
my $datesrc = "as of";
if(!$filedate) {
    # mxr.mozilla.org gave us a time, hg.mozilla.org does not!
    $filedate = time();
    $datesrc="downloaded on";
}

# get the hash from the download file
my $newhash= sha256($txt);

if(!$opt_f && $oldhash eq $newhash) {
    report "Downloaded file identical to previous run's source file. Exiting";
    if($opt_u && -e $txt && !unlink($txt)) {
        report "Failed to remove $txt: $!\n";
    }
    exit;
}

report "SHA256 of new file: $newhash";

my $currentdate = scalar gmtime($filedate);

my $format = $opt_t ? "plain text and " : "";
if( $stdout
) {
    open(CRT, '> -') or die "Couldn't open STDOUT: $!\n";
} else {
    open(CRT,">$crt.~") or die "Couldn't open $crt.~: $!\n";
}
print CRT <<EOT;
##
## Bundle of CA Root Certificates
##
## Certificate data from Mozilla ${datesrc}: ${currentdate} GMT
##
## This is a bundle of X.509 certificates of public Certificate Authorities
## (CA). These were automatically extracted from Mozilla's root certificates
## file (certdata.txt). This file can be found in the mozilla source tree:

```

```

## ${url}
##
## It contains the certificates in ${format}PEM format and therefore
## can be directly used with curl / libcurl / php_curl, or with
## an Apache+mod_ssl webserver for SSL client authentication.
## Just configure this file as the SSLCACertificateFile.
##
## Conversion done with mk-ca-bundle.pl version $version.
## SHA256: $newhash
##

EOT

report "Processing '$txt' ...";
my $cname;
my $certnum = 0;
my $skipnum = 0;
my $start_of_cert = 0;
my @precert;
my $cka_value;
my $valid = 1;

open(TXT,"$txt")
or die "Couldn't open $txt: $!\n";
while (<TXT>) {
if (/^*\*\*\*\* BEGIN LICENSE BLOCK \*\*\*\*\*/) {
print CRT;
print if ($opt_1);
while (<TXT>) {
print CRT;
print if ($opt_1);
last if (/^*\*\*\*\* END LICENSE BLOCK \*\*\*\*\*);
}
}
elsif(/^# (Issuer|Serial Number|Subject|Not Valid Before|Not Valid After |Fingerprint \((MD5\)|Fingerprint
\((SHA1\))):/) {
push @precert, $_;
$valid = 1;
next;
}
elsif(/^#\s*$/) {
undef @precert;
next;
}
}
chomp;

# Example:
# CKA_NSS_SERVER_DISTRICT_AFTER MULTILINE_OCTAL

```

```
# \062\060\060\066\061\067\060\060\060\060\060\060\132
```

```
# END
```

```
if (/^CKA_NSS_SERVER_DISTRICT_AFTER (CK_BBOOL CK_FALSE|MULTILINE_OCTAL)/) {
```

```
  if($1 eq "MULTILINE_OCTAL") {
```

```
    my @timestamp;
```

```
    while (<TXT>) {
```

```
      last if (/^END/);
```

```
      chomp;
```

```
      my @octets = split(\\);
```

```
      shift @octets;
```

```
      for (@octets) {
```

```
        push
```

```
@timestamp, chr(oct);
```

```
      }
```

```
    }
```

```
    # A trailing Z in the timestamp signifies UTC
```

```
    if($timestamp[12] ne "Z") {
```

```
      report "distrust date stamp is not using UTC";
```

```
    }
```

```
    # Example date: 200617000000Z
```

```
    # Means 2020-06-17 00:00:00 UTC
```

```
    my $distrustat =
```

```
      timegm($timestamp[10] . $timestamp[11], # second
```

```
        $timestamp[8] . $timestamp[9], # minute
```

```
        $timestamp[6] . $timestamp[7], # hour
```

```
        $timestamp[4] . $timestamp[5], # day
```

```
        ($timestamp[2] . $timestamp[3]) - 1, # month
```

```
        "20" . $timestamp[0] . $timestamp[1]); # year
```

```
    if(time >= $distrustat) {
```

```
      # not trusted anymore
```

```
      $skipnum++;
```

```
      report "Skipping: $scaname is not trusted anymore" if ($opt_v);
```

```
      $valid = 0;
```

```
    }
```

```
  else {
```

```
    # still trusted
```

```
  }
```

```
}
```

```
next;
```

```
}
```

```
# this
```

```
is a match for the start of a certificate
```

```
if (/^CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE/) {
```

```
  $start_of_cert = 1
```

```
}
```

```
if ($start_of_cert && /^CKA_LABEL UTF8 \"(.*)\"/) {
```

```

$scaname = $1;
}
my %trust_purposes_by_level;
if ($start_of_cert && /^CKA_VALUE MULTILINE_OCTAL/) {
    $scka_value="";
    while (<TXT>) {
        last if (/^END/);
        chomp;
        my @octets = split(\\);
        shift @octets;
        for (@octets) {
            $scka_value .= chr(oct);
        }
    }
}
if(/^CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST/ && $valid) {
    # now scan the trust part to determine how we should trust this cert
    while (<TXT>) {
        last if (/^#/);
        if (/^CKA_TRUST_([A-Z_+])\s+CK_TRUST\s+CKT_NSS_([A-Z_+])\s*$/) {
            if ( !is_in_list($1,@valid_mozilla_trust_purposes) ) {
                report "Warning: Unrecognized trust purpose for cert: $scaname. Trust purpose: $1. Trust Level: $2";
            } elsif ( is_in_list($2,@valid_mozilla_trust_levels) ) {
                report "Warning:
Unrecognized trust level for cert: $scaname. Trust purpose: $1. Trust Level: $2";
            } else {
                push @{$trust_purposes_by_level{$2}}, $1;
            }
        }
    }
}

if ( !should_output_cert(%trust_purposes_by_level) ) {
    $skipnum ++;
    report "Skipping: $scaname" if ($opt_v);
} else {
    my $data = $scka_value;
    $scka_value = "";
    my $encoded = MIME::Base64::encode_base64($data, "");
    $encoded =~ s/(.{1,$opt_w})/$1\n/g;
    my $pem = "-----BEGIN CERTIFICATE-----\n"
        . $encoded
        . "-----END CERTIFICATE-----\n";
    print CRT "\n$scaname\n";
    print CRT @precert if($opt_m);
    my $maxLength = length(decode('UTF-8', $scaname, Encode::FB_CROAK | Encode::LEAVE_SRC));
    if ($opt_t) {
        foreach my $key (keys %trust_purposes_by_level) {
            my $string = $key . ": " . join(" ", @{$trust_purposes_by_level{$key}});

```

```

    $maxStringLength = List::Util::max( length($string), $maxStringLength
);
    print CRT $string . "\n";
}
}
print CRT ("=" x $maxStringLength . "\n");
if (!$opt_t) {
    print CRT $pem;
} else {
    my $pipe = "";
    foreach my $hash (@included_signature_algorithms) {
        $pipe = "|$openssl x509 -" . $hash . " -fingerprint -noout -inform PEM";
        if (!$stdout) {
            $pipe .= " >> $crt.~";
            close(CRT) or die "Couldn't close $crt.~: $!";
        }
        open(TMP, $pipe) or die "Couldn't open openssl pipe: $!";
        print TMP $pem;
        close(TMP) or die "Couldn't close openssl pipe: $!";
        if (!$stdout) {
            open(CRT, ">>$crt.~") or die "Couldn't open $crt.~: $!";
        }
    }
    $pipe = "|$openssl x509 -text -inform PEM";
    if (!$stdout) {
        $pipe .= " >> $crt.~";
        close(CRT) or die "Couldn't close $crt.~: $!";
    }
    open(TMP, $pipe) or die "Couldn't open openssl pipe: $!";
    print TMP
    $pem;
    close(TMP) or die "Couldn't close openssl pipe: $!";
    if (!$stdout) {
        open(CRT, ">>$crt.~") or die "Couldn't open $crt.~: $!";
    }
}
report "Parsing: $cname" if ($opt_v);
$certnum++;
$start_of_cert = 0;
}
undef @precert;
}

}
close(TXT) or die "Couldn't close $txt: $!\n";
close(CRT) or die "Couldn't close $crt.~: $!\n";
unless( $stdout ) {
    if ($opt_b && -e $crt) {

```

```

my $bk = 1;
while (-e "$crt.~${bk}~") {
    $bk++;
}
rename $crt, "$crt.~${bk}~" or die "Failed to create backup $crt.~$bk}~: $!\n";
} elsif( -e $crt ) {
    unlink( $crt ) or die "Failed to remove $crt: $!\n";
}
rename "$crt.~", $crt or die "Failed to rename $crt.~ to $crt: $!\n";
}
if($opt_u && -e $txt && !unlink($txt)) {
    report "Failed to remove $txt: $!\n";
}
report "Done ($crtnum CA certs processed, $skipnum skipped).";

```

Found in path(s):

```

* /opt/cola/permits/1978342439_1713364772.434879/0/ca-certificates-bundle-20230506-r0-os-alpine-3-18-0-tar-
xz/ca-certificates-20230506-tar-bz2/ca-certificates-20230506/mk-ca-bundle.pl

```

No license file was found, but licenses were detected in source scan.

```

/* c_rehash.c - Create hash symlinks for certificates
* C implementation based on the original Perl and shell versions
*
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*/

```

Found in path(s):

```

* /opt/cola/permits/1978342439_1713364772.434879/0/ca-certificates-bundle-20230506-r0-os-alpine-3-18-0-tar-
xz/ca-certificates-20230506-tar-bz2/ca-certificates-20230506/c_rehash.c

```

## 1.260 scanelf 1.3.7-r2

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## 1.261 xxhash 2.3.0

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## 1.263 jaraco-functools 4.0.1

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## 1.283 sqlx 1.4.0

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## 1.285 ibm-sarama 1.43.2

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## 1.286 openssl 3.1.5-r0

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at assemblers) written by James Hacker.
```

```
<signature of Ty Coon>, 1 April 1989
Ty Coon, President of Vice
```

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## 1.290 backports.tarfile 1.2.0

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## 1.294 prometheus-procfs 0.15.1

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procfs provides functions to retrieve system, kernel and process metrics from the pseudo-filesystem proc.

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## 1.296 more-itertools 10.3.0

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## 1.297 zipp 3.19.2

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## 1.301 wheel 0.43.0

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## 1.310 sarama 1.43.2

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# 1.317 inflect 7.3.1

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## 1.318 jaraco.text 3.12.1

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To do so,  
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```
<one line to give the program's name and a brief idea of what it does.>  
Copyright (C) 19yy <name of author>
```

```
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any later version.
```

```
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```

```
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Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston MA 02110-1301 USA
```

Also add information on how to contact you by electronic and paper mail.

If the program is interactive, make it output a short notice like this when it starts in an interactive mode:

```
Gnomovision version 69, Copyright (C) 19xx name of author  
Gnomovision comes with ABSOLUTELY NO WARRANTY; for details type `show w'.  
This is free software, and you are welcome to redistribute it  
under certain conditions; type `show c' for details.
```

The hypothetical commands `show w' and `show c' should show the appropriate parts of the General Public License. Of course, the commands you use may be called something other than `show w' and `show c'; they could even be mouse-clicks or menu items--whatever suits your program.

You should also get your employer (if you work as a programmer) or your school, if any, to sign a "copyright disclaimer" for the program, if necessary. Here a sample; alter the names:

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<signature of Ty Coon>, 1 April 1989  
Ty Coon, President of Vice

That's all there is to it!

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@end enumerate

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@item

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@var{one line to give the library's name and an idea of what it does.}

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```
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Gnomovision comes with ABSOLUTELY NO WARRANTY; for details type `show w'.
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under certain conditions; type `show c' for details.
@end smallexample
```

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```
@example
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`Gnomovision' (which makes passes at compilers) written by James Hacker.
```

```
@var{signature of Ty Coon}, 1 April 1989
Ty Coon, President of Vice
@end example
```

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(For example, a function in a library to compute square roots has a purpose that is entirely well-defined independent of the

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```
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```

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# 1.322 utmps-libs 0.1.2.2-r0

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```
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*/
```

Found in path(s):

```
* /opt/cola/permits/2107250486_1721401668.7303083/0/ssl-client-c-zip/ssl_client.c
```

# 1.324 libssl3 3.1.6-r2

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```

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under certain conditions; type `show c' for details.
```

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```
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program `Gnomovision' (a program to direct compilers to make passes
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```

```
<signature of Ty Coon>, 1 April 1989
Ty Coon, President of Vice
```

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## 1.325 python-setuptools 71.1.0

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Python was created in the early 1990s by Guido van Rossum at Stichting Mathematisch Centrum (CWI, see <https://www.cwi.nl>) in the Netherlands as a successor of a language called ABC. Guido remains Python's principal author, although it includes many contributions from others.

In 1995, Guido continued his work on Python at the Corporation for National Research Initiatives (CNRI, see <https://www.cnri.reston.va.us>) in Reston, Virginia where he released several versions of the software.

In May 2000, Guido and the Python core development team moved to BeOpen.com to form the BeOpen PythonLabs team. In October of the same year, the PythonLabs team moved to Digital Creations, which became Zope Corporation. In 2001, the Python Software Foundation (PSF, see <https://www.python.org/psf/>) was formed, a non-profit organization created specifically to own Python-related Intellectual Property. Zope Corporation was a sponsoring member of the PSF.

All

Python releases are Open Source (see <https://opensource.org> for the Open Source Definition). Historically, most, but not all, Python releases have also been GPL-compatible; the table below summarizes the various releases.

Release	Derived from	Year	Owner	GPL-compatible? (1)
0.9.0 thru 1.2		1991-1995	CWI	yes
1.3 thru 1.5.2	1.2	1995-1999	CNRI	yes
1.6	1.5.2	2000	CNRI	no
2.0	1.6	2000	BeOpen.com	no
1.6.1	1.6	2001	CNRI	yes (2)
2.1	2.0+1.6.1	2001	PSF	no
2.0.1	2.0+1.6.1	2001	PSF	yes
2.1.1	2.1+2.0.1	2001	PSF	yes
2.1.2	2.1.1	2002	PSF	yes
2.1.3	2.1.2	2002	PSF	yes
2.2 and above	2.1.1	2001-now	PSF	yes

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## 1.326 simple launcher 1.1.0.14

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#### A. HISTORY OF THE SOFTWARE

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Python was created in the early 1990s by Guido van Rossum at Stichting Mathematisch Centrum (CWI, see <http://www.cwi.nl>) in the Netherlands as a successor of a language called ABC. Guido remains Python's principal author, although it includes many contributions from others.

In 1995, Guido continued his work on Python at the Corporation for National Research Initiatives (CNRI, see <http://www.cnri.reston.va.us>) in Reston, Virginia where he released several versions of the software.

In May 2000, Guido and the Python core development team moved to BeOpen.com to form the BeOpen PythonLabs team. In October of the same year, the PythonLabs team moved to Digital Creations (now Zope Corporation, see <http://www.zope.com>). In 2001, the Python Software Foundation (PSF, see <http://www.python.org/psf/>) was formed, a non-profit organization created specifically to own Python-related Intellectual Property. Zope Corporation is a sponsoring member of the PSF.

All Python releases are Open Source (see <http://www.opensource.org> for the Open Source Definition). Historically, most, but not all, Python releases have also been GPL-compatible; the table below summarizes the various releases.

Release	Derived from	Year	Owner	GPL-compatible? (1)
0.9.0 thru 1.2		1991-1995	CWI	yes
1.3 thru 1.5.2	1.2	1995-1999	CNRI	yes
1.6	1.5.2	2000	CNRI	no

2.0	1.6	2000	BeOpen.com	no
1.6.1	1.6	2001	CNRI	yes (2)
2.1	2.0+1.6.1	2001	PSF	no
2.0.1	2.0+1.6.1	2001	PSF	yes
2.1.1	2.1+2.0.1	2001	PSF	yes
2.2	2.1.1	2001	PSF	yes
2.1.2	2.1.1	2002	PSF	yes
2.1.3				
2.1.2	2002	PSF	yes	
2.2.1	2.2	2002	PSF	yes
2.2.2	2.2.1	2002	PSF	yes
2.2.3	2.2.2	2003	PSF	yes
2.3	2.2.2	2002-2003	PSF	yes
2.3.1	2.3	2002-2003	PSF	yes
2.3.2	2.3.1	2002-2003	PSF	yes
2.3.3	2.3.2	2002-2003	PSF	yes
2.3.4	2.3.3	2004	PSF	yes
2.3.5	2.3.4	2005	PSF	yes
2.4	2.3	2004	PSF	yes
2.4.1	2.4	2005	PSF	yes
2.4.2	2.4.1	2005	PSF	yes
2.4.3	2.4.2	2006	PSF	yes
2.4.4	2.4.3	2006	PSF	yes
2.5	2.4	2006	PSF	yes
2.5.1	2.5	2007	PSF	yes
2.5.2	2.5.1	2008	PSF	yes
2.5.3	2.5.2	2008	PSF	yes
2.6	2.5	2008	PSF	yes
2.6.1	2.6	2008	PSF	yes
2.6.2	2.6.1	2009	PSF	yes
2.6.3	2.6.2	2009	PSF	yes
2.6.4	2.6.3	2009	PSF	yes
2.6.5	2.6.4	2010	PSF	yes
3.0	2.6	2008	PSF	yes
3.0.1	3.0	2009	PSF	yes
3.1	3.0.1	2009	PSF	yes
3.1.1	3.1	2009	PSF	yes
3.1.2	3.1	2010	PSF	yes
3.2	3.1	2010	PSF	yes

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=====  
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=====

The Distutils2 project was started by Tarek Ziad and is currently  
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distlib has started off using some of the code from distutil2.

If you're making a patch, please add your name below in alphabetical order,  
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- Elson Rodriguez
- Luis Rojas
- Erik Rose
- Brian Rosner
- Vinay Sajip
- Victor Stinner
- Alexandre Vassalotti
- Nadeem Vawda

Metadata-Version: 1.0

Name: setuptools

Version: 0.6c9

Summary: Download, build, install, upgrade, and uninstall Python packages -- easily!

Home-page: <http://pypi.org/pypi/setuptools>

Author: Phillip J. Eby

Author-email: [distutils-sig@python.org](mailto:distutils-sig@python.org)

License: PSF or ZPL

Description: =====

Installing and Using Setuptools

=====

.. contents:: **Table of Contents**

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 Installation Instructions  
 -----

Windows

=====

Install setuptools using the provided ``.exe`` installer. If you've previously installed older versions of setuptools, please delete all ``setuptools\*.egg`` and ``setuptools.pth`` files from your system's ``site-packages`` directory (and any other ``sys.path`` directories) **FIRST**.

If you are upgrading a previous version of setuptools that was installed using an ``.exe`` installer, please be sure to also *uninstall that older version* via your system's "Add/Remove Programs" feature, **BEFORE** installing the newer version.

Once installation is complete, you will find an ``easy\_install.exe`` program in

your Python `Scripts` subdirectory. Be sure to add this directory to your `PATH` environment variable, if you haven't already done so.

## RPM-Based Systems

=====

Install `setuptools` using the provided source RPM. The included `.spec` file assumes you are installing using the default `python` executable, and is not specific to a particular Python version. The `easy_install` executable will be installed to a system `bin` directory such as `/usr/bin`.

If you wish to install to a location other than the default Python installation's default `site-packages` directory (and `$prefix/bin` for scripts), please use the `.egg`-based installation approach described in the following section.

## Cygwin, Mac OS X, Linux, Other

=====

1. Download the appropriate egg for your version of Python (e.g. `setuptools-0.6c9-py2.4.egg`). Do NOT rename it.
2. Run it as if it were a shell script, e.g. `sh setuptools-0.6c9-py2.4.egg`. `Setuptools` will install itself using the matching version of Python (e.g. `python2.4`), and will place the `easy_install` executable in the default location for installing Python scripts (as determined by the standard distutils configuration files, or by the Python installation).

If you want to install `setuptools` to somewhere other than `site-packages` or your default distutils installation locations for libraries and scripts, you may include `EasyInstall` command-line options such as `--prefix`, `--install-dir`, and so on, following the `.egg` filename on the same command line. For example::

```
sh setuptools-0.6c9-py2.4.egg --prefix=~
```

You can use `--help` to get a full options list, but we recommend consulting the `EasyInstall` manual for detailed instructions, especially the section on custom installation locations.

.. `EasyInstall` manual: <http://peak.telecommunity.com/DevCenter/EasyInstall>  
.. the section on custom installation locations: <http://peak.telecommunity.com/DevCenter/EasyInstall#custom-installation-locations>

## Cygwin Note

-----

If you are trying to install setuptools for the **Windows** version of Python (as opposed to the Cygwin version that lives in `~/usr/bin`), you must make sure that an appropriate executable (`python2.3`, `python2.4`, or `python2.5`) is on your **Cygwin** `PATH` when invoking the egg. For example, doing the following at a Cygwin bash prompt will install setuptools for the **Windows** Python found at `C:\Python24`:

```
In -s /cygdrive/c/Python24/python.exe python2.4
PATH=.:$PATH sh setuptools-0.6c9-py2.4.egg
rm python2.4
```

## Downloads

=====

All setuptools downloads can be found at the project's home page in the Python Package Index. Scroll to the very bottom of the page to find the links.

.. the project's home page in the Python Package Index: <http://pypi.org/pypi/setuptools>

In addition to the PyPI downloads, the development version of `setuptools` is available from the `Python SVN sandbox`, and in-development versions of the `0.6 branch` are available as well.

.. `0.6 branch`: <http://svn.python.org/projects/sandbox/branches/setuptools-0.6/#egg=setuptools-dev06>

.. `Python SVN sandbox`: <http://svn.python.org/projects/sandbox/trunk/setuptools/#egg=setuptools-dev>

-----

## Using

### Setuptools and EasyInstall

-----

Here are some of the available manuals, tutorials, and other resources for learning about Setuptools, Python Eggs, and EasyInstall:

- \* `The EasyInstall user's guide and reference manual`
- \* `The setuptools Developer's Guide`
- \* `The pkg_resources API reference`
- \* `Package Compatibility Notes` (user-maintained)
- \* `The Internal Structure of Python Eggs`

Questions, comments, and bug reports should be directed to the `distutils-sig` mailing list. If you have written (or know of) any tutorials, documentation,

plug-ins, or other resources for setuptools users, please let us know about them there, so this reference list can be updated. If you have working, \*tested\* patches to correct problems or add features, you may submit them to the `setuptools bug tracker`\_.

.. \_setuptools bug tracker: <http://bugs.python.org/setuptools/>  
.. \_Package Compatibility Notes: <http://peak.telecommunity.com/DevCenter/PackageNotes>  
.. \_The Internal Structure of Python Eggs: <http://peak.telecommunity.com/DevCenter/EggFormats>  
.. \_The setuptools Developer's Guide: <http://peak.telecommunity.com/DevCenter/setuptools>  
.. \_The pkg\_resources API reference: <http://peak.telecommunity.com/DevCenter/PkgResources>  
.. \_The EasyInstall user's guide and reference manual: <http://peak.telecommunity.com/DevCenter/EasyInstall>  
.. \_distutils-sig mailing list: <http://mail.python.org/pipermail/distutils-sig/>

-----  
Credits  
-----

\* The original design for the ``.egg`` format and the ``pkg\_resources`` API was co-created by Phillip Eby and Bob Ippolito. Bob also implemented the first version of ``pkg\_resources``, and supplied the OS X operating system version compatibility algorithm.

\* Ian Bicking implemented many early "creature comfort" features of `easy_install`, including support for downloading via Sourceforge and Subversion repositories. Ian's comments on the Web-SIG about WSGI application deployment also inspired the concept of "entry points" in eggs, and he has given talks at PyCon and elsewhere to inform and educate the community about eggs and setuptools.

\* Jim Fulton contributed time and effort to build automated tests of various aspects of ``easy\_install``, and supplied the doctests for the command-line ``.exe`` wrappers on Windows.

\* Phillip J. Eby is the principal author and maintainer of setuptools, and first proposed the idea of an importable binary distribution format for Python application plug-ins.

\* Significant parts of the implementation of setuptools were funded by the Open Source Applications Foundation, to provide a plug-in infrastructure for the Chandler PIM application.

In addition, many OSAF staffers (such as Mike "Code Bear" Taylor) contributed their time and stress as guinea pigs for the use of eggs and setuptools, even before eggs were "cool". (Thanks, guys!)

Keywords: CPAN PyPI distutils eggs package management



Platform: UNKNOWN  
Classifier: Development Status :: 3 - Alpha  
Classifier: Intended Audience :: Developers  
Classifier: License :: OSI Approved :: Python Software Foundation License  
Classifier: License :: OSI Approved :: Zope Public License  
Classifier: Operating System :: OS Independent  
Classifier: Programming Language :: Python  
Classifier: Topic :: Software Development :: Libraries :: Python Modules  
Classifier: Topic :: System :: Archiving :: Packaging  
Classifier: Topic :: System :: Systems Administration  
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# 1.327 importlib-resources 6.1.1-r0

## 1.327.1 Available under license :

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## 1.328 jinja 3.1.2

### 1.328.1 Available under license :

BSD-3-Clause

## 1.329 aws-aws-sdk-go-v2-service-ssooidc

### 1.26.4

#### 1.329.1 Available under license :

name: License Scan

on: [pull\_request]

jobs:

licensescan:

name: License Scan

runs-on: ubuntu-latest

strategy:

matrix:

python-version: [3.9]

steps:

- name: Checkout target

uses: actions/checkout@v2

with:

path: sdkbase

ref: \${{ github.base\_ref }}

- name: Checkout this ref

uses: actions/checkout@v2

with:

path: new-ref

fetch-depth: 0

- name: Get Diff

run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT \${{ github.event.pull\_request.base.sha }}

\${{ github.sha }} > refDiffFiles.txt

- name: Get Target Files

```

    run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
- name: Checkout scancode
  uses: actions/checkout@v2
  with:
    repository: nexB/scancode-toolkit
    path: scancode-toolkit
    fetch-depth: 1
- name: Set up Python ${{ matrix.python-version }}
  uses: actions/setup-python@v2
  with:
    python-version: ${{ matrix.python-version }}
# ScanCode
- name: Self-configure scancode
  working-directory: ./scancode-toolkit
  run: ./scancode --help
- name: Run Scan code on target
  run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
- name: Run Scan code on pr ref
  run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
# compare
- name: License test
  run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses
are the same. Success."; exit 0; fi
CreateLicense
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
Retry

```

RetryMetricsHeader  
setLegacyContextSigningOptions  
Signing  
Deserialize stack step  
AddRawResponseToMetadata  
ErrorCloseResponseBody  
CloseResponseBody  
ResponseErrorWrapper  
RequestIDRetriever  
OperationDeserializer  
AddTimeOffsetMiddleware  
RecordResponseTiming  
RequestResponseLogger  
ListReceivedLicenses  
Initialize stack step  
RegisterServiceMetadata  
legacyEndpointContextSetter  
SetLogger  
Serialize stack step  
setOperationInput  
ResolveEndpoint  
OperationSerializer  
Build stack step  
ClientRequestID  
ComputeContentLength  
UserAgent  
AddTimeOffsetMiddleware  
RecursionDetection  
Finalize stack step  
ResolveAuthScheme  
GetIdentity  
ResolveEndpointV2  
disableHTTPS  
ComputePayloadHash  
Retry  
RetryMetricsHeader  
setLegacyContextSigningOptions  
Signing  
Deserialize stack step  
AddRawResponseToMetadata  
ErrorCloseResponseBody  
CloseResponseBody  
ResponseErrorWrapper  
RequestIDRetriever  
OperationDeserializer  
AddTimeOffsetMiddleware  
RecordResponseTiming  
RequestResponseLogger



```

// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
    "context"
    "fmt"
    awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
    "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
    "github.com/aws/smithy-go/middleware"
    smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
//
// If the account that created the license is the same that is performing the
// check out, you must specify the account as the beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
    if params == nil {
        params = &CheckoutLicenseInput{}
    }

    result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
    if err != nil {
        return nil, err
    }

    out := result.(*CheckoutLicenseOutput)
    out.ResultMetadata = metadata
    return out, nil
}

type CheckoutLicenseInput struct {

    //
    // Checkout type.
    //
    // This member is required.
    CheckoutType types.CheckoutType

    // Unique, case-sensitive identifier that you provide to ensure the idempotency of
    // the request.
    //
    // This member is required.
    ClientToken *string

```

```

// License entitlements.
//
// This member is required.
Entitlements []types.EntitlementData

// Key fingerprint identifying the license.
//
// This member is required.
KeyFingerprint *string

// Product SKU.
//
// This member is required.
ProductSKU *string

// License beneficiary.
Beneficiary *string

// Node ID.
NodeId *string

noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

// Checkout type.
CheckoutType types.CheckoutType

// Allowed license entitlements.
EntitlementsAllowed []types.EntitlementData

// Date and time at which the license checkout expires.
Expiration *string

// Date and time at which the license checkout is issued.
IssuedAt *string

// Amazon Resource Name (ARN) of the checkout license.
LicenseArn
*string

// License consumption token.
LicenseConsumptionToken *string

// Node ID.
NodeId *string

```

```

// Signed token.
SignedToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
    if err := stack.Serialize.Add(&setOperationInputMiddleware{ }, middleware.After); err != nil {
        return err
    }
    err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{ }, middleware.After)
    if err != nil {
        return err
    }
    err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{ }, middleware.After)
    if err != nil {
        return err
    }
    if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
        return fmt.Errorf("add protocol finalizers: %v", err)
    }

    if err = addLegacyEndpointContextSetter(stack, options); err != nil {
        return err
    }
    if err = addSetLoggerMiddleware(stack,
options); err != nil {
        return err
    }
    if err = addClientRequestID(stack); err != nil {
        return err
    }
    if err = addComputeContentLength(stack); err != nil {
        return err
    }
    if err = addResolveEndpointMiddleware(stack, options); err != nil {
        return err
    }
    if err = addComputePayloadSHA256(stack); err != nil {
        return err
    }
    if err = addRetry(stack, options); err != nil {
        return err
    }
    if err = addRawResponseToMetadata(stack); err != nil {

```

```

return err
}
if err = addRecordResponseTiming(stack); err != nil {
return err
}
if err = addClientUserAgent(stack, options); err != nil {
return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
return err
}
if err = addUserAgentRetryMode(stack,
options); err != nil {
return err
}
if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
return err
}
if err = addRecursionDetection(stack); err != nil {
return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
return err
}
return nil
}

```

```

func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
return &awsmiddleware.RegisterServiceMetadata{
Region:    region,
ServiceID: ServiceID,
OperationName: "CheckoutLicense",
}
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
"context"
"fmt"
awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
"github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
"github.com/aws/smithy-go/middleware"
smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
if params == nil {
params = &CreateLicenseInput{}
}

result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
if err != nil {
return nil, err
}

out := result.(*CreateLicenseOutput)
out.ResultMetadata = metadata
return out, nil
}

type CreateLicenseInput struct {

// License beneficiary.
//
// This member is required.
Beneficiary *string

// Unique, case-sensitive identifier that you provide to ensure the idempotency of

```

```
// the request.
//
//
This member is required.
ClientToken *string

// Configuration for consumption of the license. Choose a provisional
// configuration for workloads running with continuous connectivity. Choose a
// borrow configuration for workloads with offline usage.
//
// This member is required.
ConsumptionConfiguration *types.ConsumptionConfiguration

// License entitlements.
//
// This member is required.
Entitlements []types.Entitlement

// Home Region for the license.
//
// This member is required.
HomeRegion *string

// License issuer.
//
// This member is required.
Issuer *types.Issuer

// License name.
//
// This member is required.
LicenseName *string

// Product name.
//
// This member is required.
ProductName *string

// Product SKU.
//
// This member is required.
ProductSKU *string

// Date and time range during which the license is valid, in ISO8601-UTC format.
//
// This member is required.
Validity *types.DatetimeRange
```

```

// Information about
the license.
LicenseMetadata []types.Metadata

noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

// Amazon Resource Name (ARN) of the license.
LicenseArn *string

// License status.
Status types.LicenseStatus

// License version.
Version *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
if err := stack.Serialize.Add(&setOperationInputMiddleware{ }, middleware.After); err != nil {
return err
}
err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{ }, middleware.After)
if err != nil {
return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{ }, middleware.After)
if err != nil {
return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
return fmt.Errorf("add protocol finalizers: %v", err)
}

if
err = addLegacyEndpointContextSetter(stack, options); err != nil {
return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
return err
}
if err = addClientRequestID(stack); err != nil {

```

```

return err
}
if err = addComputeContentLength(stack); err != nil {
return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
return err
}
if err = addComputePayloadSHA256(stack); err != nil {
return err
}
if err = addRetry(stack, options); err != nil {
return err
}
if err = addRawResponseToMetadata(stack); err != nil {
return err
}
if err = addRecordResponseTiming(stack); err != nil {
return err
}
if err = addClientUserAgent(stack, options); err != nil {
return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
return
err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
return err
}
if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
return err
}
if err = addRecursionDetection(stack); err != nil {
return err
}

```



```

}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
    return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
    return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
    return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
    return err
}
return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
    return &awsmiddleware.RegisterServiceMetadata{
        Region:    region,
        ServiceID: ServiceID,
        OperationName:
        "CreateLicense",
    }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
    "context"
    "fmt"
    awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
    "github.com/aws/aws-sdk-go-v2/service/grafana/types"
    "github.com/aws/smithy-go/middleware"
    smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
    if params == nil {
        params = &DisassociateLicenseInput{}
    }

    result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
    if err != nil {
        return nil, err
    }
}

```

```

}

out := result.(*DisassociateLicenseOutput)
out.ResultMetadata = metadata
return out, nil
}

type DisassociateLicenseInput struct {

    // The type of license to remove from the workspace.
    //
    // This member is required.
    LicenseType types.LicenseType

    //
    // The ID of the workspace to remove the Grafana Enterprise license from.
    //
    // This member is required.
    WorkspaceId *string

    noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

    // A structure containing information about the workspace.
    //
    // This member is required.
    Workspace *types.WorkspaceDescription

    // Metadata pertaining to the operation's result.
    ResultMetadata middleware.Metadata

    noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
    if err := stack.Serialize.Add(&setOperationInputMiddleware{ }, middleware.After); err != nil {
        return err
    }
    err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{ }, middleware.After)
    if err != nil {
        return err
    }
    err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{ }, middleware.After)
    if err != nil {
        return err
    }
}

```

```

}
if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
err != nil {
    return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addLegacyEndpointContextSetter(stack, options); err != nil {
    return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
    return err
}
if err = addClientRequestID(stack); err != nil {
    return err
}
if err = addComputeContentLength(stack); err != nil {
    return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
    return err
}
if err = addComputePayloadSHA256(stack); err != nil {
    return err
}
if err = addRetry(stack, options); err != nil {
    return err
}
if err = addRawResponseToMetadata(stack); err != nil {
    return err
}
if err = addRecordResponseTiming(stack); err != nil {
    return err
}
if err = addClientUserAgent(stack, options); err != nil {
    return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil
{
    return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
    return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
    return err
}

```

```

}
if err = addUserAgentRetryMode(stack, options); err != nil {
    return err
}
if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
    return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
    return err
}
if err = addRecursionDetection(stack); err != nil {
    return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
    return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
    return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
    return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
    return err
}
return nil
}

```

```

func newServiceMetadataMiddleware_opDisassociateLicense(region string)

```

```

*awsmiddleware.RegisterServiceMetadata
{
return &awsmiddleware.RegisterServiceMetadata{
    Region:    region,
    ServiceID: ServiceID,
    OperationName: "DisassociateLicense",
}
}

```

```

CheckoutLicense

```

```

Initialize stack step

```

```

RegisterServiceMetadata

```

```

legacyEndpointContextSetter

```

```

SetLogger

```

```

OperationInputValidation

```

```

Serialize stack step

```

```

setOperationInput

```

```

ResolveEndpoint

```

```

OperationSerializer

```

Build stack step  
ClientRequestID  
ComputeContentLength  
UserAgent  
AddTimeOffsetMiddleware  
RecursionDetection  
Finalize stack step  
ResolveAuthScheme  
GetIdentity  
ResolveEndpointV2  
disableHTTPS  
ComputePayloadHash  
Retry  
RetryMetricsHeader  
setLegacyContextSigningOptions  
Signing  
Deserialize stack step  
AddRawResponseToMetadata  
ErrorCloseResponseBody  
CloseResponseBody  
ResponseErrorWrapper  
RequestIDRetriever  
OperationDeserializer  
AddTimeOffsetMiddleware  
RecordResponseTiming  
RequestResponseLogger  
DisassociateLicense  
Initialize stack step  
RegisterServiceMetadata  
legacyEndpointContextSetter  
SetLogger  
OperationInputValidation  
Serialize stack step  
setOperationInput  
ResolveEndpoint  
OperationSerializer  
Build stack step  
ClientRequestID  
ComputeContentLength  
UserAgent  
AddTimeOffsetMiddleware  
RecursionDetection  
Finalize stack step  
ResolveAuthScheme  
GetIdentity  
ResolveEndpointV2  
disableHTTPS  
ComputePayloadHash

Retry  
RetryMetricsHeader  
setLegacyContextSigningOptions  
Signing  
Deserialize stack step  
AddRawResponseToMetadata  
ErrorCloseResponseBody  
CloseResponseBody  
ResponseErrorWrapper  
RequestIDRetriever  
OperationDeserializer  
AddTimeOffsetMiddleware  
RecordResponseTiming  
RequestResponseLogger  
CheckoutBorrowLicense  
Initialize stack step  
RegisterServiceMetadata  
legacyEndpointContextSetter  
SetLogger  
OperationInputValidation  
Serialize stack step  
setOperationInput  
ResolveEndpoint  
OperationSerializer  
Build stack step  
ClientRequestID  
ComputeContentLength  
UserAgent  
AddTimeOffsetMiddleware  
RecursionDetection  
Finalize stack step  
ResolveAuthScheme  
GetIdentity  
ResolveEndpointV2  
disableHTTPS  
ComputePayloadHash  
Retry  
RetryMetricsHeader  
setLegacyContextSigningOptions  
Signing  
Deserialize stack step  
AddRawResponseToMetadata  
ErrorCloseResponseBody  
CloseResponseBody  
ResponseErrorWrapper  
RequestIDRetriever  
OperationDeserializer  
AddTimeOffsetMiddleware

```

RecordResponseTiming
RequestResponseLogger
AssociateLicense
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
Retry
RetryMetricsHeader
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
    "context"
    "fmt"
    awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
    "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
    "github.com/aws/smithy-go/middleware"

```

```

smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
    if params == nil {
        params = &ListReceivedLicensesInput{}
    }

    result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
    if err != nil {
        return nil, err
    }

    out := result.(*ListReceivedLicensesOutput)
    out.ResultMetadata = metadata
    return out, nil
}

type ListReceivedLicensesInput struct {

    // Filters to scope the results. The following filters are supported:
    //
    // - ProductSKU
    //
    // - Status
    //
    //
    // - Fingerprint
    //
    // - IssuerName
    //
    // - Beneficiary
    Filters []types.Filter

    // Amazon Resource Names (ARNs) of the licenses.
    LicenseArns []string

    // Maximum number of results to return in a single call.
    MaxResults *int32

    // Token for the next set of results.
    NextToken *string

    noSmithyDocumentSerde
}

```



```

type ListReceivedLicensesOutput struct {

    // Received license details.
    Licenses []types.GrantedLicense

    // Token for the next set of results.
    NextToken *string

    // Metadata pertaining to the operation's result.
    ResultMetadata middleware.Metadata

    noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
    if err := stack.Serialize.Add(&setOperationInputMiddleware{ }, middleware.After); err != nil {
        return err
    }
    err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{ }, middleware.After)
    if err != nil {
        return err
    }
    err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{ },
middleware.After)
    if err != nil {
        return err
    }
    if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
        return fmt.Errorf("add protocol finalizers: %v", err)
    }

    if err = addLegacyEndpointContextSetter(stack, options); err != nil {
        return err
    }
    if err = addSetLoggerMiddleware(stack, options); err != nil {
        return err
    }
    if err = addClientRequestID(stack); err != nil {
        return err
    }
    if err = addComputeContentLength(stack); err != nil {
        return err
    }
    if err = addResolveEndpointMiddleware(stack, options); err != nil {
        return err
    }
}

```

```

if err = addComputePayloadSHA256(stack); err != nil {
    return err
}
if err = addRetry(stack, options); err != nil {
    return err
}
if err = addRawResponseToMetadata(stack); err != nil {
    return err
}
if err = addRecordResponseTiming(stack); err != nil {
    return err
}
if err = addClientUserAgent(stack, options); err != nil {
    return err
}
if err
= smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
    return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
    return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
    return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
    return err
}
if err = addRecursionDetection(stack); err != nil {
    return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
    return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
    return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
    return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {

```

```

    return err
}
return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region
string) *awsmiddleware.RegisterServiceMetadata {
return &awsmiddleware.RegisterServiceMetadata{
    Region:    region,
    ServiceID: ServiceID,
    OperationName: "ListReceivedLicenses",
}
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
    "context"
    "fmt"
    awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
    "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
    "github.com/aws/smithy-go/middleware"
    smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
    if params == nil {
        params = &GetLicenseInput{}
    }

    result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
    if err != nil {
        return nil, err
    }

    out := result.(*GetLicenseOutput)
    out.ResultMetadata = metadata
    return out, nil
}

type GetLicenseInput struct {

    // Amazon Resource Name (ARN) of the license.
    //

```

```

// This member is required.
LicenseArn *string

// License version.
Version *string

noSmithyDocumentSerde
}

type
GetLicenseOutput struct {

// License details.
License *types.License

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
if err := stack.Serialize.Add(&setOperationInputMiddleware{ }, middleware.After); err != nil {
return err
}
err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{ }, middleware.After)
if err != nil {
return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{ }, middleware.After)
if err != nil {
return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addLegacyEndpointContextSetter(stack, options); err != nil {
return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
return err
}
if err = addClientRequestID(stack); err
!= nil {
return err
}
if err = addComputeContentLength(stack); err != nil {

```

```

return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
return err
}
if err = addComputePayloadSHA256(stack); err != nil {
return err
}
if err = addRetry(stack, options); err != nil {
return err
}
if err = addRawResponseToMetadata(stack); err != nil {
return err
}
if err = addRecordResponseTiming(stack); err != nil {
return err
}
if err = addClientUserAgent(stack, options); err != nil {
return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
return err
}
if err = addOpGetLicenseValidationMiddleware(stack);
err != nil {
return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
return err
}
if err = addRecursionDetection(stack); err != nil {
return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
return err
}

```

```

}
if err = addResponseErrorMiddleware(stack); err != nil {
    return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
    return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
    return err
}
return nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
return &awsmiddleware.RegisterServiceMetadata{
    Region:    region,
    ServiceID: ServiceID,
    OperationName: "GetLicense",
}
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
    "context"
    "fmt"
    awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
    "github.com/aws/aws-sdk-go-v2/service/grafana/types"
    "github.com/aws/smithy-go/middleware"
    smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. To upgrade, you must use
// ENTERPRISE for the licenseType , and pass in a valid Grafana Labs token for the
// grafanaToken . Upgrading to Grafana Enterprise incurs additional fees. For more
// information, see [Upgrade a workspace to Grafana Enterprise].
//
// [Upgrade a workspace to Grafana Enterprise]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-Grafana-Enterprise.html
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
    if params == nil {
        params = &AssociateLicenseInput{}
    }

    result, metadata, err := c.invokeOperation(ctx,

```

```

"AssociateLicense", params, optFns, c.addOperationAssociateLicenseMiddlewares)
if err != nil {
    return nil, err
}

out := result.(*AssociateLicenseOutput)
out.ResultMetadata = metadata
return out, nil
}

type AssociateLicenseInput struct {

    // The type of license to associate with the workspace.
    //
    // Amazon Managed Grafana workspaces no longer support Grafana Enterprise free
    // trials.
    //
    // This member is required.
    LicenseType types.LicenseType

    // The ID of the workspace to associate the license with.
    //
    // This member is required.
    WorkspaceId *string

    // A token from Grafana Labs that ties your Amazon Web Services account with a
    // Grafana Labs account. For more information, see [Link your account with Grafana Labs].
    //
    // [Link your account with Grafana Labs]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
    GrafanaEnterprise.html#AMG-workspace-register-enterprise
    GrafanaToken *string

    noSmithyDocumentSerde
}

type AssociateLicenseOutput
struct {

    // A structure containing data about the workspace.
    //
    // This member is required.
    Workspace *types.WorkspaceDescription

    // Metadata pertaining to the operation's result.
    ResultMetadata middleware.Metadata

    noSmithyDocumentSerde
}

```

```

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
    if err := stack.Serialize.Add(&setOperationInputMiddleware{ }, middleware.After); err != nil {
        return err
    }
    err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{ }, middleware.After)
    if err != nil {
        return err
    }
    err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{ }, middleware.After)
    if err != nil {
        return err
    }
    if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
        return fmt.Errorf("add protocol finalizers: %v", err)
    }

    if err = addLegacyEndpointContextSetter(stack, options); err != nil {
        return err
    }
    if err = addSetLoggerMiddleware(stack,
options); err != nil {
        return err
    }
    if err = addClientRequestID(stack); err != nil {
        return err
    }
    if err = addComputeContentLength(stack); err != nil {
        return err
    }
    if err = addResolveEndpointMiddleware(stack, options); err != nil {
        return err
    }
    if err = addComputePayloadSHA256(stack); err != nil {
        return err
    }
    if err = addRetry(stack, options); err != nil {
        return err
    }
    if err = addRawResponseToMetadata(stack); err != nil {
        return err
    }
    if err = addRecordResponseTiming(stack); err != nil {
        return err
    }
    if err = addClientUserAgent(stack, options); err != nil {
        return err
    }
}

```



```

if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
    return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
    return err
}
if err = addUserAgentRetryMode(stack,
options); err != nil {
    return err
}
if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
    return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
    return err
}
if err = addRecursionDetection(stack); err != nil {
    return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
    return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
    return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
    return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
    return err
}
return nil
}

```

```

func newServiceMetadataMiddleware_opAssociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
return &awsmiddleware.RegisterServiceMetadata{
    Region:    region,
    ServiceID: ServiceID,
    OperationName: "AssociateLicense",
}
}

```

```

}
ListLicenses
Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
Finalize stack step
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  Retry
  RetryMetricsHeader
  setLegacyContextSigningOptions
  Signing
Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
AWS SDK for Go
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{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
      "type": "integer"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
      "type": "long"
    },
  },
}

```



```

    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse": {
    "type": "structure",
    "members": {},
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
    "type": "structure",
    "members": {
      "Name": {
        "target": "smithy.api#String",
        "traits": {
          "smithy.api#documentation": "<p>The type of name to filter by.</p>"
        }
      },
      "Values": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
        "traits": {
          "smithy.api#documentation": "<p>One or more values for the name to filter by.</p>"
        }
      },
      "Operator": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
        "traits": {
          "smithy.api#documentation": "<p>An operator for filtering results.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#documentation": "<p>A filter object that is used to return more specific results from a describe operation.\n  Filters can be used to match a set of resources by specific criteria.</p>"
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
    "type":
"list",
    "member": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest"
    },

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```

    "output": {
      "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerError"
      },
      {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
      },
      {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
      },
      {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
      }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Get details for a Bring Your Own License (BYOL) subscription that's
registered to your account.</p>",
      "smithy.api#http": {
        "code": 200,
        "method": "POST",
        "uri": "/subscription/GetRegisteredSubscriptionProvider"
      },
      "smithy.api#idempotent": {}
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest": {
    "type": "structure",
    "members": {
      "SubscriptionProviderArn": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
        "traits": {
          "smithy.api#documentation":
"<p>The Amazon Resource Name (ARN) of the BYOL registration resource to get details for.</p>",
          "smithy.api#required": {}
        }
      }
    },
    "traits": {
      "smithy.api#input": {}
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse": {
    "type": "structure",
    "members": {

```



```

"com.amazonaws.licenseanagerlinuxsubscriptions#GetServiceSettings": {
  "type": "operation",
  "input": {
    "target":
"com.amazonaws.licenseanagerlinuxsubscriptions#GetServiceSettingsRequest"
  },
  "output": {
    "target": "com.amazonaws.licenseanagerlinuxsubscriptions#GetServiceSettingsResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licenseanagerlinuxsubscriptions#InternalServerError"
    },
    {
      "target": "com.amazonaws.licenseanagerlinuxsubscriptions#ThrottlingException"
    },
    {
      "target": "com.amazonaws.licenseanagerlinuxsubscriptions#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Lists the Linux subscriptions service settings for your account.</p>",
    "smithy.api#http": {
      "code": 200,
      "method": "POST",
      "uri": "/subscription/GetServiceSettings"
    },
    "smithy.api#idempotent": {}
  }
},
"com.amazonaws.licenseanagerlinuxsubscriptions#GetServiceSettingsRequest": {
  "type": "structure",
  "members": {}
},
"com.amazonaws.licenseanagerlinuxsubscriptions#GetServiceSettingsResponse": {
  "type": "structure",
  "members": {
    "LinuxSubscriptionsDiscovery": {
      "target": "com.amazonaws.licenseanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
      "traits": {
        "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
      }
    },
    "LinuxSubscriptionsDiscoverySettings": {
      "target": "com.amazonaws.licenseanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
      "traits": {
        "smithy.api#documentation": "<p>Lists

```

the settings defined for Linux subscriptions discovery. The settings include if Organizations integration has been enabled, and which Regions data will be aggregated from.</p>

```
    }
  },
  "Status": {
    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
    "traits": {
      "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being
applied.</p>"
    }
  },
  "StatusMessage": {
    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
    "traits": {
      "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings
current status.</p>"
    }
  },
  "HomeRegions": {
    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
    "traits": {
      "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n  subscriptions.</p>"
    }
  }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
  "type": "structure",
  "members": {
    "AmiId": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The AMI ID used to launch the instance.</p>"
      }
    },
    "InstanceID": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The instance ID of the resource.</p>"
      }
    },
    "InstanceType": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The instance type of the resource.</p>"
      }
    }
  }
}
```



```

    },
    "AccountID": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The account ID which owns the instance.</p>"
      }
    },
    "Status": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The status of the instance.</p>"
      }
    },
    "Region": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The Region the instance is running in.</p>"
      }
    },
    "UsageOperation": {
      "target": "smithy.api#String",

      "traits": {
        "smithy.api#documentation": "<p>The usage operation of the instance. For more information, see For
more information, see\n    <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-
subscriptions-usage-operation.html\">Usage\n    operation values</a> in the <i>License Manager User
Guide</i>.</p>"
      }
    },
    "ProductCode": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
      "traits": {
        "smithy.api#documentation": "<p>The product code for the instance. For more information, see <a
href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-
operation.html\">Usage\n    operation values</a> in the <i>License Manager User Guide</i> .</p>"
      }
    },
    "LastUpdatedTime": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The time in which the last discovery updated the instance
details.</p>"
      }
    },
    "SubscriptionName": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The name of the license subscription that the instance uses.</p>"
      }
    }
  }
}

```



```

    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerError": {
    "type": "structure",
    "members": {
      "message": {
        "target": "smithy.api#String"
      }
    },
    "traits": {
      "smithy.api#documentation":
        "<p>An exception occurred with the service.</p>",
      "smithy.api#error": "server"
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
    "type": "service",
    "version": "2018-05-10",
    "operations": [
      {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider"
      },
      {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider"
      },
      {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
      },
      {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
      },
      {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"
      },
      {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders"
      },
      {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource"
      },
      {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider"
      },
      {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource"
      },
      {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource"
      }
    ]
  }
}

```

```

    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
    }
  ],
  "traits": {
    "aws.api#service": {
      "sdkId": "License Manager Linux Subscriptions",
      "arnNamespace": "license-manager-linux-subscriptions",
      "cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
    },
    "aws.auth#sigv4": {
      "name": "license-manager-linux-subscriptions"
    },
    "aws.protocols#restJson1": {},
    "smithy.api#cors": {
      "additionalAllowedHeaders": [
        "*",
        "content-type",
        "x-amz-content-sha256",
        "x-amz-user-agent",
        "x-amzn-platform-id",
        "x-amzn-trace-id"
      ],
      "additionalExposedHeaders": [
        "x-amzn-errortype",
        "x-amzn-requestid",
        "x-amzn-trace-id"
      ]
    },
    "smithy.api#documentation": "<p>With License Manager,
you can discover and track your commercial Linux subscriptions on running Amazon EC2 instances.</p>",
    "smithy.api#title": "AWS License Manager Linux Subscriptions",
    "smithy.rules#endpointRuleSet": {
      "version": "1.0",
      "parameters": {
        "Region": {
          "builtIn": "AWS::Region",
          "required": false,
          "documentation": "The AWS region used to dispatch the request.",
          "type": "String"
        }
      },
      "UseDualStack": {
        "builtIn": "AWS::UseDualStack",
        "required": true,
        "default": false,
        "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not
support dual-stack, dispatching the request MAY return an error.",

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```

        "type": "Boolean"
    },
    "UseFIPS": {
        "builtIn": "AWS::UseFIPS",
        "required": true,
        "default": false,
        "documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the
configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
        "type": "Boolean"
    },
    "Endpoint": {
        "builtIn": "SDK::Endpoint",
        "required": false,
        "documentation": "Override the endpoint used to send this request",
        "type": "String"
    }
},
"rules": [
    {
        "conditions": [
            {
                "fn": "isSet",
                "argv": [
                    {
                        "ref": "Endpoint"
                    }
                ]
            }
        ]
    }
],
"rules": [
    {
        "conditions": [
            {
                "fn": "booleanEquals",
                "argv": [
                    {
                        "ref": "UseFIPS"
                    },
                    true
                ]
            }
        ]
    }
],
    "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
    "type": "error"
},
{
    "conditions": [],

```

```

"rules": [
  {
    "conditions": [
      {
        "fn": "booleanEquals",
        "argv": [
          {
            "ref": "UseDualStack"
          },
          true
        ]
      }
    ]
  }
],
"error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
"type": "error"
},
{
  "conditions": [],
  "endpoint": {
    "url": {
      "ref": "Endpoint"
    },
    "properties": {},
    "headers": {}
  },
  "type": "endpoint"
}
],
"type": "tree"
}
],
"type": "tree"
},
{
  "conditions": [],
  "rules": [
    {
      "conditions": [
        {
          "fn": "isSet",
          "argv": [
            {
              "ref": "Region"
            }
          ]
        }
      ]
    }
  ]
}
}

```

```

    ],
    "rules": [
      {
        "conditions": [
          {
            "fn": "aws.partition",
            "argv": [
              {
                "ref": "Region"
              }
            ],
            "assign": "PartitionResult"
          }
        ],
        "rules": [
          {
            "conditions": [
              {
                "fn": "booleanEquals",
                "argv": [
                  {
                    "ref": "UseFIPS"
                  },
                  true
                ]
              },
              {
                "fn": "booleanEquals",
                "argv": [
                  {
                    "ref": "UseDualStack"
                  },
                  true
                ]
              }
            ]
          }
        ]
      }
    ],
    "rules": [
      {
        "conditions": [
          {
            "fn": "booleanEquals",
            "argv": [
              true,
              {
                "fn": "getAttr",

```

```

        "argv": [
            {
                "ref": "PartitionResult"
            }
        ],
        "supportsFIPS"
    ]
}
],
{
    "fn": "booleanEquals",
    "argv": [
        true,
        {
            "fn": "getAttr",
            "argv": [
                {
                    "ref": "PartitionResult"
                },
                "supportsDualStack"
            ]
        }
    ]
}
],
"rules": [
    {
        "conditions": [],

"rules": [
    {
        "conditions": [],
        "endpoint": {
            "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
            "properties": {},
            "headers": {}
        },
        "type": "endpoint"
    }
],

"type": "tree"
},
"type": "tree"

```



```

    },
    {
      "conditions": [],
      "error": "FIPS and DualStack are enabled, but this partition does not support
one or both",
      "type": "error"
    }
  ],
  "type": "tree"
},
{
  "conditions": [
    {
      "fn": "booleanEquals",
      "argv": [
        {
          "ref": "UseFIPS"
        },
        true
      ]
    }
  ],
  "rules": [
    {
      "conditions": [
        {
          "fn": "booleanEquals",
          "argv": [
            {
              "fn": "getAttr",
              "argv": [
                {
                  "ref": "PartitionResult"
                },
                "supportsFIPS"
              ]
            },
            true
          ]
        }
      ]
    }
  ],
  "rules": [
    {
      "conditions": [],
      "rules": [

```

```

        {
            "conditions": [],
            "endpoint": {
                "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dnsSuffix}",
                "headers": {}
            },
            "type": "endpoint"
        }
    ],
    "type": "tree"
}
],
"type": "tree"
},
{
    "conditions": [],
    "error": "FIPS is enabled
but this partition does not support FIPS",
    "type": "error"
}
],
"type": "tree"
},
{
    "conditions": [
        {
            "fn": "booleanEquals",
            "argv": [
                {
                    "ref": "UseDualStack"
                },
                true
            ]
        }
    ]
}
],
"rules": [
    {
        "conditions": [
            {
                "fn": "booleanEquals",
                "argv": [
                    true,
                    {
                        "fn": "getAttr",

```

```

        "argv": [
            {
                "ref": "PartitionResult"
            },
            "supportsDualStack"
        ]
    }
],
"rules": [
    {
        "conditions": [],
        "rules": [
            {
                "conditions": [],
                "endpoint": {
                    "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                    "properties": {},
                    "headers": {}
                },
                "type": "endpoint"
            }
        ],
        "type": "tree"
    }
],
"rules": [
    {
        "conditions": [],
        "error": "DualStack is enabled but this partition does not support DualStack",
        "type": "error"
    }
],
"rules": [
    {
        "conditions": [],
        "endpoint": {
            "url": "https://license-manager-linux-

```

```

subscriptions.{Region}.{PartitionResult#dnsSuffix}",
    "properties": {},
    "headers": {}
  },
  "type": "endpoint"
}
],
"type": "tree"
}
],
"type": "tree"
}
],
"type": "tree"
},
{
  "conditions": [],
  "error": "Invalid Configuration: Missing Region",
  "type": "error"
}
],
"type": "tree"
}
]
},
"smithy.rules#endpointTests": {
  "testCases": [
    {
      "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"
        }
      }
    },
    {
      "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.us-east-1.amazonaws.com"
        }
      }
    }
  ],
}

```

```

    "params": {
      "Region": "us-east-1",
      "UseFIPS": true,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-linux-subscriptions.us-east-1.api.aws"
      }
    },
    "params": {
      "Region": "us-east-1",
      "UseFIPS": false,
      "UseDualStack": true
    }
  },
  {
    "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
      }
    }
  },
  {
    "params": {
      "Region": "us-east-1",
      "UseFIPS": false,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-linux-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
      }
    },
    "params": {
      "Region": "cn-north-1",
      "UseFIPS": true,
      "UseDualStack": true
    }
  },
  },

```

```

{
  "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"
    }
  },
  "params": {
    "Region": "cn-north-1",
    "UseFIPS": true,
    "UseDualStack": false
  }
},
{
  "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
    }
  },
  "params": {
    "Region": "cn-north-1",
    "UseFIPS": false,
    "UseDualStack": true
  }
},
{
  "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-linux-subscriptions.cn-north-1.amazonaws.com.cn"
    }
  },
  "params": {
    "Region": "cn-north-1",
    "UseFIPS": false,
    "UseDualStack": false
  }
},
{
  "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.api.aws"
    }
  },

```

```

    "params": {
      "Region": "us-gov-east-1",
      "UseFIPS": true,
      "UseDualStack": true
    }
  },
  {
    "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.amazonaws.com"
      }
    }
  },
  {
    "params": {
      "Region": "us-gov-east-1",
      "UseFIPS": true,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-linux-subscriptions.us-gov-east-1.api.aws"
      }
    }
  },
  {
    "params": {
      "Region": "us-gov-east-1",
      "UseFIPS": false,
      "UseDualStack": true
    }
  },
  {

```

```

"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-linux-subscriptions.us-gov-east-1.amazonaws.com"
    }
  },
  "params": {
    "Region": "us-gov-east-1",
    "UseFIPS": false,
    "UseDualStack": false
  }
},
{

```

```

    "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
    "expect": {
      "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
    },
    "params": {
      "Region": "us-iso-east-1",
      "UseFIPS": true,
      "UseDualStack": true
    }
  },
  {
    "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
      }
    },
    "params": {
      "Region": "us-iso-east-1",
      "UseFIPS": true,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
enabled",
    "expect": {
      "error": "DualStack is enabled but this partition does not support DualStack"
    },
    "params": {
      "Region": "us-iso-east-1",
      "UseFIPS": false,
      "UseDualStack": true
    }
  },
  {
    "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-linux-subscriptions.us-iso-east-1.c2s.ic.gov"
      }
    },
    "params": {
      "Region": "us-iso-east-1",
      "UseFIPS":
false,
      "UseDualStack": false
    }
  }
}

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    }
  },
  {
    "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
    "expect": {
      "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
    },
    "params": {
      "Region": "us-isob-east-1",
      "UseFIPS": true,
      "UseDualStack": true
    }
  },
  {
    "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
      }
    },
    "params": {
      "Region": "us-isob-east-1",
      "UseFIPS": true,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
    "expect": {
      "error": "DualStack is enabled but this partition does not support DualStack"
    },
    "params": {
      "Region": "us-isob-east-1",
      "UseFIPS": false,
      "UseDualStack": true
    }
  },
  {
    "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-linux-subscriptions.us-isob-east-1.sc2s.sgov.gov"
      }
    },
    "params": {
      "Region": "us-isob-east-1",
      "UseFIPS": false,

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        "UseDualStack": false
    }
},
{
    "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
    "expect": {
        "endpoint": {
            "url": "https://example.com"
        }
    },
    "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": false,
        "Endpoint": "https://example.com"
    }
},
{
    "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
    "expect": {
        "endpoint": {
            "url": "https://example.com"
        }
    },
    "params": {
        "UseFIPS": false,
        "UseDualStack": false,
        "Endpoint": "https://example.com"
    }
},
{
    "documentation": "For custom endpoint with fips enabled and dualstack disabled",
    "expect": {
        "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
    },
    "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
        "UseDualStack": false,
        "Endpoint": "https://example.com"
    }
},
{
    "documentation": "For custom endpoint with fips disabled and dualstack enabled",
    "expect": {

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        "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
    },
    "params": {
"Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": true,
        "Endpoint": "https://example.com"
    }
    },
    {
        "documentation": "Missing region",
        "expect": {
            "error": "Invalid Configuration: Missing Region"
        }
    }
    ],
    "version": "1.0"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
    "type": "string",
    "traits": {
        "smithy.api#enum": [
            {
                "name": "Enabled",
                "value": "Enabled",
                "documentation": "Enabled LinuxSubscriptionsDiscovery"
            },
            {
                "name": "Disabled",
                "value": "Disabled",
                "documentation": "Disabled LinuxSubscriptionsDiscovery"
            }
        ]
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings": {
    "type": "structure",
    "members": {
        "SourceRegions": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
            "traits": {
                "smithy.api#documentation": "<p>The Regions in which to discover data for Linux
subscriptions.</p>",
                "smithy.api#required": {}
            }
        }
    }
}

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    }
  },
  "OrganizationIntegration": {
    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
    "traits": {
      "smithy.api#documentation":
"<p>Details if you have enabled resource discovery across your accounts in Organizations.</p>",
      "smithy.api#required": {}
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Lists the settings defined for discovering Linux subscriptions.</p>"
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
      },
      {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
      },
      {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
      }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Lists the running Amazon EC2 instances that were discovered with
commercial Linux\n  subscriptions.</p>",
      "smithy.api#http": {
        "code": 200,
        "method": "POST",
        "uri": "/subscription/ListLinuxSubscriptionInstances"
      },
      "smithy.api#idempotent": {},
      "smithy.api#paginated": {
        "inputToken": "NextToken",
        "outputToken": "NextToken",
        "pageSize": "MaxResults",

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        "items": "Instances"
    }
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest":
{
    "type": "structure",
    "members": {
        "Filters": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
            "traits": {
                "smithy.api#documentation": "<p>An array of structures that you can use to filter the results by your
specified criteria. \n \tFor example, you can specify <code>Region</code> in the <code>Name</code>, with the
\n \t<code>contains</code> operator to list all subscriptions that match a partial string in the \n
\n \t<code>Value</code>, such as <code>us-west</code>.</p>\n \t<p>For each filter, you can specify one of the
following values for the <code>Name</code> key \n \tto streamline results:</p>\n \t<ul>\n \t<li>\n
<p>\n \t<code>AccountID</code>\n \t</p>\n \t</li>\n \t<li>\n
<p>\n \t<code>AmiID</code>\n \t</p>\n \t</li>\n \t<li>\n
<p>\n \t<code>DualSubscription</code>\n \t</p>\n \t</li>\n \t<li>\n
<p>\n \t<code>InstanceID</code>\n \t</p>\n \t</li>\n \t<li>\n
<p>\n \t<code>InstanceType</code>\n \t</p>\n \t</li>\n \t<li>\n
<p>\n \t<code>ProductCode</code>\n \t</p>\n \t</li>\n \t<li>\n
<p>\n \t<code>Region</code>\n \t</p>\n \t</li>\n \t<li>\n
<p>\n \t<code>Status</code>\n \t</p>\n \t</li>\n \t<li>\n
<p>\n \t<code>UsageOperation</code>\n \t</p>\n \t</li>\n \t</ul>\n \t<p>For each filter, you can use
one of the following <code>Operator</code>
values to \n \tdefine the behavior of the filter:</p>\n \t<ul>\n \t<li>\n
<p>\n \t<code>contains</code>\n \t</p>\n \t</li>\n \t<li>\n
<p>\n \t<code>equals</code>\n \t</p>\n \t</li>\n \t<li>\n
<p>\n \t<code>Notequal</code>\n \t</p>\n \t</li>\n \t</ul>"
            }
        },
        "MaxResults": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
            "traits": {
                "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
            }
        },
        "NextToken": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>A token to specify where to
start paginating. This \n\tis the nextToken from a previously truncated response.</p>",
                "smithy.api#length": {
                    "min": 1,
                    "max": 16384
                }
            }
        }
    }
}

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    }
  },
  "traits": {
    "smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if
parameters in request increases."
  }
},
"com.amazonaws.licenseanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
  "type": "structure",
  "members": {
    "Instances": {
      "target": "com.amazonaws.licenseanagerlinuxsubscriptions#InstanceList",
      "traits": {
        "smithy.api#documentation": "<p>An array that contains instance objects.</p>"
      }
    },
    "NextToken": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional objects.</p>"
      }
    }
  }
},
"com.amazonaws.licenseanagerlinuxsubscriptions#ListLinuxSubscriptions": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licenseanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
  },
  "output": {
    "target": "com.amazonaws.licenseanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licenseanagerlinuxsubscriptions#InternalServerError"
    },
    {
      "target": "com.amazonaws.licenseanagerlinuxsubscriptions#ThrottlingException"
    },
    {
      "target": "com.amazonaws.licenseanagerlinuxsubscriptions#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Lists the Linux subscriptions that have been discovered. If you have

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linked your organization, the returned results will include data aggregated across your accounts in Organizations.

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"smithy.api#http": {
  "code": 200,
  "method": "POST",
  "uri": "/subscription/ListLinuxSubscriptions"
},
"smithy.api#idempotent": {},
"smithy.api#paginated": {
  "inputToken": "NextToken",
  "outputToken": "NextToken",
  "pageSize": "MaxResults",

"items": "Subscriptions"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
  "type": "structure",
  "members": {
    "Filters": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
      "traits": {
        "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those that match one or more sets of key-value pairs that you specify. For example, you can filter by the name of <code>Subscription</code> with an optional operator to see subscriptions that match, partially match, or don't match a certain subscription's name.</p><p>The valid names for this filter are:</p><ul><li><code>Subscription</code></li></ul><p>The valid Operators for this filter are:</p><ul><li><code>contains</code></li><li><code>>equals</code></li><li><code>NotEqual</code></li></ul>"
      }
    },
    "MaxResults": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
      "traits": {
        "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
      }
    },
    "NextToken": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken from a previously truncated response.</p>",
        "smithy.api#length": {
          "min": 1,

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        "max": 16384
      }
    }
  },
  "traits": {
    "smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if
parameters in request increases."
  }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
  "type": "structure",
  "members": {
    "Subscriptions": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
      "traits": {
        "smithy.api#documentation": "<p>An array that contains subscription objects.</p>"
      }
    },
    "NextToken": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional objects.</p>"
      }
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders": {
    "type": "operation",
    "input": {
      "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest"
    },
    "output": {
      "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerError"
      },
      {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
      },
      {

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        "name": "EQUAL",
        "value": "Equal",
        "documentation": "Equal operator"
    },
    {
        "name": "NOT_EQUAL",
        "value": "NotEqual",
        "documentation": "Not equal operator"
    },
    {
        "name": "CONTAINS",
        "value": "Contains",
        "documentation": "Contains operator"
    }
],
"smithy.api#length": {
    "min": 1,
    "max": 20
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration":
{
    "type": "string",
    "traits": {
        "smithy.api#enum": [
            {
                "name": "Enabled",
                "value": "Enabled",
                "documentation": "Enabled OrganizationIntegration"
            },
            {
                "name": "Disabled",
                "value": "Disabled",
                "documentation": "Disabled OrganizationIntegration"
            }
        ]
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
    "type": "list",
    "member": {
        "target": "smithy.api#String"
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider": {
    "type": "operation",
    "input": {

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    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerError"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Register the supported third-party subscription provider for your Bring Your Own License (BYOL) subscription.</p>",
    "smithy.api#http": {
      "code": 200,
      "method": "POST",
      "uri": "/subscription/RegisterSubscriptionProvider"
    },
    "smithy.api#idempotent": {}
  }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest": {
  "type": "structure",
  "members": {
    "SubscriptionProviderSource": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
      "traits": {
        "smithy.api#documentation": "<p>The supported Linux subscription provider to register.</p>",
        "smithy.api#required": {}
      }
    },
    "SecretArn": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
      "traits": {
        "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the secret where you've stored your subscription provider's access token. For \n\t\t\tRHEL subscriptions managed through the Red Hat Subscription Manager (RHSM), the secret contains \n\t\t\tyour Red Hat Offline token.</p>",
        "smithy.api#required": {}
      }
    }
  },
  "Tags": {

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        "target": "com.amazonaws.licenseanagerlinuxsubscriptions#Tags",
        "traits": {
            "smithy.api#documentation": "<p>The metadata tags to assign to your registered Linux subscription
provider \n\t\t\tresource.</p>"
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licenseanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse": {
    "type": "structure",
    "members": {
        "SubscriptionProviderSource": {
            "target": "com.amazonaws.licenseanagerlinuxsubscriptions#SubscriptionProviderSource",
            "traits": {
                "smithy.api#documentation":
"<p>The Linux subscription provider that you registered.</p>"
            }
        },
        "SubscriptionProviderArn": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Linux subscription
provider resource that you registered.</p>"
            }
        },
        "SubscriptionProviderStatus": {
            "target": "com.amazonaws.licenseanagerlinuxsubscriptions#SubscriptionProviderStatus",
            "traits": {
                "smithy.api#documentation": "<p>Indicates the status of the registration action for the Linux
subscription provider \n\t\t\t\tthat you requested.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licenseanagerlinuxsubscriptions#RegisteredSubscriptionProvider":
{
    "type": "structure",
    "members": {
        "SubscriptionProviderArn": {
            "target": "com.amazonaws.licenseanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Linux subscription

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provider resource that you registered.</p>"

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    }
  },
  "SubscriptionProviderSource": {
    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
    "traits": {
      "smithy.api#documentation": "<p>A supported third-party Linux subscription provider. License Manager currently supports \n\t\t\tRed Hat subscriptions.</p>"
    }
  },
  "SecretArn": {
    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
    "traits": {
      "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Secrets Manager secret that stores your registered Linux subscription provider \n\t\t\taccess token. For RHEL account subscriptions, this is the offline token.</p>"
    }
  },
  "SubscriptionProviderStatus": {
    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
    "traits": {
      "smithy.api#documentation": "<p>Indicates the status of your registered Linux subscription provider access token \n\t\t\tfrom the last time License Manager retrieved subscription data. For RHEL account subscriptions, \n\t\t\tthis is the status of the offline token.</p>"
    }
  },
  "SubscriptionProviderStatusMessage": {
    "target": "smithy.api#String",
    "traits": {
      "smithy.api#documentation": "<p>A detailed message that's associated with your BYOL subscription \n\t\t\tprovider token status.</p>"
    }
  },
  "LastSuccessfulDataRetrievalTime": {
    "target": "smithy.api#String",
    "traits": {
      "smithy.api#documentation": "<p>The timestamp from the last time that License Manager accessed third-party subscription data \n\t\t\tfor your account from your registered Linux subscription provider.</p>"
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>A third-party provider for operating system (OS) platform software and license \n\t\t\tsubscriptions, such as Red Hat. When you register a third-party Linux subscription \n\t\t\tprovider, License Manager can get subscription data from the registered provider.</p>"
  }
},
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"com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList":
{
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider"
  }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException": {
  "type": "structure",
  "members": {
    "message": {
      "target": "smithy.api#String"
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Unable to find the requested Amazon Web Services resource.</p>",
    "smithy.api#error": "client"
  }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn": {
  "type": "string",
  "traits": {
    "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-\\.]{0,63}:secret:[^/]{1,1023}$"
  }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
  "type": "string",
  "traits": {
    "smithy.api#enum": [
      {
        "name": "InProgress",
        "value": "InProgress",
        "documentation": "InProgress status"
      },
      {
        "name": "Completed",
        "value": "Completed",
        "documentation": "Completed status"
      },
      {
        "name": "Successful",
        "value": "Successful",
        "documentation": "Successful status"
      },
      {
        "name": "Failed",

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        "value": "Failed",
        "documentation": "Failed status"
    }
]
}
},

"com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
    "type": "list",
    "member": {
        "target": "smithy.api#String",
        "traits": {
            "smithy.api#length": {
                "min": 1,
                "max": 100
            }
        }
    },
    "traits": {
        "smithy.api#length": {
            "min": 1,
            "max": 100
        },
        "smithy.api#uniqueItems": {}
    }
},

"com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
    "type": "map",
    "key": {
        "target": "smithy.api#String"
    },
    "value": {
        "target": "smithy.api#String"
    }
},

"com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The name of the subscription.</p>"
            }
        },
        "Type": {
            "target": "smithy.api#String",
            "traits": {

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"smithy.api#documentation": "<p>The type of subscription. The type can be subscription-included with Amazon EC2, Bring Your Own\n Subscription model (BYOS), or from the Amazon Web Services Marketplace. Certain subscriptions may use licensing from the\n Amazon Web Services Marketplace as well as OS licensing from Amazon EC2 or BYOS.</p>"

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    }
  },
  "InstanceCount": {
    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
    "traits": {
      "smithy.api#documentation": "<p>The total amount of running instances using this
subscription.</p>"
    }
  }
},
"traits": {
  "smithy.api#documentation": "<p>An object which details a discovered Linux subscription.</p>"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
  }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn": {
  "type": "string",
  "traits": {
    "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,510}/[a-z0-9-\\.]{1,510}$"
  }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource": {
  "type": "string",
  "traits": {
    "smithy.api#enum": [
      {
        "name": "RedHat",
        "value": "RedHat",
        "documentation": "RedHat subscription provider namespace"
      }
    ]
  }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource"
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    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus": {
    "type": "string",
    "traits": {
      "smithy.api#enum": [
        {
          "name": "ACTIVE",
          "value": "ACTIVE",
          "documentation": "ACTIVE status"
        },
        {
          "name": "INVALID",
          "value": "INVALID",

"documentation": "INVALID status"
        },
        {
          "name": "PENDING",
          "value": "PENDING",
          "documentation": "PENDING status"
        }
      ]
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList": {
    "type": "list",
    "member": {
      "target": "smithy.api#String"
    },
    "traits": {
      "smithy.api#length": {
        "min": 0,
        "max": 50
      },
      "smithy.api#sensitive": {}
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse"
    },
    "errors": [
      {

```



```

    "members": {},
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#Tags": {
    "type": "map",
    "key": {
      "target": "smithy.api#String"
    },
    "value": {
      "target": "smithy.api#String"
    },
    "traits": {
      "smithy.api#length": {
        "min": 0,
        "max": 50
      },
      "smithy.api#sensitive": {}
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
    "type": "structure",
    "members": {
      "message": {
        "target": "smithy.api#String"
      }
    },
    "traits": {
      "smithy.api#documentation":
"<p>The request was denied due to request throttling.</p>",
      "smithy.api#error": "client"
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerError"
      },
      {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
      }
    ]
  }
}

```

```

    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Remove one or more metadata tag from the specified Amazon Web
Services resource.</p>",
    "smithy.api#http": {
      "method": "DELETE",
      "uri": "/tags/{resourceArn}"
    },
    "smithy.api#idempotent": {}
  }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest": {
  "type": "structure",
  "members": {
    "resourceArn": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
      "traits": {
        "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to remove the metadata tags from.</p>",
        "smithy.api#httpLabel": {},
        "smithy.api#required": {}
      }
    },
    "tagKeys": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList",
      "traits": {
        "smithy.api#documentation": "<p>A list of metadata tag keys to remove from the requested
\n\t\t\tresource.</p>",
        "smithy.api#httpQuery": "tagKeys",
        "smithy.api#required": {}
      }
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse": {
  "type": "structure",
  "members": {},
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
  "type": "operation",

```

```

"input": {
  "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
},
"output": {
  "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"
},
"errors": [
  {
    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerError"
  },
  {
    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
  },
  {
    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
  }
],
"traits": {
  "smithy.api#documentation": "<p>Updates the service settings for Linux subscriptions.</p>",
  "smithy.api#http": {
    "code": 200,
    "method": "POST",
    "uri": "/subscription/UpdateServiceSettings"
  },
  "smithy.api#idempotent": {}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest": {
  "type": "structure",
  "members": {
    "LinuxSubscriptionsDiscovery": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
      "traits": {
        "smithy.api#documentation": "<p>Describes if the discovery of Linux subscriptions is enabled.</p>",
        "smithy.api#required": {}
      }
    },
    "LinuxSubscriptionsDiscoverySettings": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
      "traits": {
        "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The settings include if Organizations\n  integration has been enabled, and which Regions data will be aggregated from.</p>",
        "smithy.api#required": {}
      }
    },
    "AllowUpdate": {

```

```

        "target":
"smithy.api#Boolean",
        "traits": {
            "smithy.api#documentation": "<p>Describes if updates are allowed to the service settings for Linux
subscriptions. If you\n    allow updates, you can aggregate Linux subscription data in more than one home
Region.</p>"
        }
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
    "type": "structure",
    "members": {
        "LinuxSubscriptionsDiscovery": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
            "traits": {
                "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
            }
        },
        "LinuxSubscriptionsDiscoverySettings": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
            "traits": {
                "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The
settings include if Organizations\n    integration has been enabled, and which Regions data will be aggregated
from.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
            "traits": {
                "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being
applied.</p>"
            }
        },
        "StatusMessage": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
            "traits": {
                "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings
current status.</p>"
            }
        }
    },
    "HomeRegions": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
        "traits": {
            "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n    subscriptions.</p>"
        }
    }
}

```





```

type DeleteLicenseInput struct {

    // Amazon Resource Name (ARN) of the license.
    //
    // This member is required.
    LicenseArn *string

    // Current version of the license.
    //
    // This member is required.
    SourceVersion
    *string

    noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

    // Date when the license is deleted.
    DeletionDate *string

    // License status.
    Status types.LicenseDeletionStatus

    // Metadata pertaining to the operation's result.
    ResultMetadata middleware.Metadata

    noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
    if err := stack.Serialize.Add(&setOperationInputMiddleware{ }, middleware.After); err != nil {
        return err
    }
    err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{ }, middleware.After)
    if err != nil {
        return err
    }
    err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{ }, middleware.After)
    if err != nil {
        return err
    }
    if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
        return fmt.Errorf("add protocol finalizers: %v", err)
    }

    if err = addLegacyEndpointContextSetter(stack, options); err !=

```

```

nil {
    return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
    return err
}
if err = addClientRequestID(stack); err != nil {
    return err
}
if err = addComputeContentLength(stack); err != nil {
    return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
    return err
}
if err = addComputePayloadSHA256(stack); err != nil {
    return err
}
if err = addRetry(stack, options); err != nil {
    return err
}
if err = addRawResponseToMetadata(stack); err != nil {
    return err
}
if err = addRecordResponseTiming(stack); err != nil {
    return err
}
if err = addClientUserAgent(stack, options); err != nil {
    return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
    return err
}
if err = addTimeOffsetBuild(stack, c); err != nil
{
    return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
    return err
}
if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
    return err
}

```

```

}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
    return err
}
if err = addRecursionDetection(stack); err != nil {
    return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
    return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
    return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
    return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
    return err
}
return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
return &awsmiddleware.RegisterServiceMetadata{
    Region:    region,
    ServiceID: ServiceID,
    OperationName: "DeleteLicense",
}
}
DeleteLicense
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
ResolveAuthScheme

```

GetIdentity  
ResolveEndpointV2  
disableHTTPS  
ComputePayloadHash  
Retry  
RetryMetricsHeader  
setLegacyContextSigningOptions  
Signing  
Deserialize stack step  
AddRawResponseToMetadata  
ErrorCloseResponseBody  
CloseResponseBody  
ResponseErrorWrapper  
RequestIDRetriever  
OperationDeserializer  
AddTimeOffsetMiddleware  
RecordResponseTiming  
RequestResponseLogger  
GetLicense  
Initialize stack step  
RegisterServiceMetadata  
legacyEndpointContextSetter  
SetLogger  
OperationInputValidation  
Serialize stack step  
setOperationInput  
ResolveEndpoint  
OperationSerializer  
Build stack step  
ClientRequestID  
ComputeContentLength  
UserAgent  
AddTimeOffsetMiddleware  
RecursionDetection  
Finalize stack step  
ResolveAuthScheme  
GetIdentity  
ResolveEndpointV2  
disableHTTPS  
ComputePayloadHash  
Retry  
RetryMetricsHeader  
setLegacyContextSigningOptions  
Signing  
Deserialize stack step  
AddRawResponseToMetadata  
ErrorCloseResponseBody  
CloseResponseBody

```

ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
    "context"
    "fmt"
    awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
    "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
    "github.com/aws/smithy-go/middleware"
    smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
    if params == nil {
        params = &CheckoutBorrowLicenseInput{}
    }

    result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
    if err != nil {
        return nil, err
    }

    out := result.(*CheckoutBorrowLicenseOutput)
    out.ResultMetadata = metadata
    return out, nil
}

type CheckoutBorrowLicenseInput struct {

    // Unique, case-sensitive identifier that you provide to ensure the idempotency of
    //
    // the request.
    //
    // This member is required.
    ClientToken *string

    // Digital signature method. The possible value is JSON Web Signature (JWS)
    // algorithm PS384. For more information, see [RFC 7518 Digital Signature with RSASSA-PSS].

```

```

//
// [RFC 7518 Digital Signature with RSASSA-PSS]: https://tools.ietf.org/html/rfc7518#section-3.5
//
// This member is required.
DigitalSignatureMethod types.DigitalSignatureMethod

// License entitlements. Partial checkouts are not supported.
//
// This member is required.
Entitlements []types.EntitlementData

// Amazon Resource Name (ARN) of the license. The license must use the borrow
// consumption configuration.
//
// This member is required.
LicenseArn *string

// Information about constraints.
CheckoutMetadata []types.Metadata

// Node ID.
NodeId *string

noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

// Information about constraints.
CheckoutMetadata []types.Metadata

// Allowed license entitlements.
EntitlementsAllowed
[]types.EntitlementData

// Date and time at which the license checkout expires.
Expiration *string

// Date and time at which the license checkout is issued.
IssuedAt *string

// Amazon Resource Name (ARN) of the license.
LicenseArn *string

// License consumption token.
LicenseConsumptionToken *string

// Node ID.

```

```

NodeId *string

// Signed token.
SignedToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
    if err := stack.Serialize.Add(&setOperationInputMiddleware{ }, middleware.After); err != nil {
        return err
    }
    err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{ }, middleware.After)
    if err != nil {
        return err
    }
    err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{ }, middleware.After)
    if err != nil {
        return
    }
    err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
    return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addLegacyEndpointContextSetter(stack, options); err != nil {
    return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
    return err
}
if err = addClientRequestID(stack); err != nil {
    return err
}
if err = addComputeContentLength(stack); err != nil {
    return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
    return err
}
if err = addComputePayloadSHA256(stack); err != nil {
    return err
}
if err = addRetry(stack, options); err != nil {

```



```

return err
}
if err = addRawResponseToMetadata(stack); err != nil {
return err
}
if err = addRecordResponseTiming(stack); err != nil {
return err
}
if err = addClientUserAgent(stack, options); err != nil {
return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
return
err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
return err
}
if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
return err
}
if err = addRecursionDetection(stack); err != nil {
return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
return err
}

```

```

}
return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region
string) *awsmiddleware.RegisterServiceMetadata {
return &awsmiddleware.RegisterServiceMetadata{
Region:    region,
ServiceID: ServiceID,
OperationName: "CheckoutBorrowLicense",
}
}
}
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```

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// Code generated by smithy-go-codegen DO NOT EDIT.

```

package licensemanager

import (
"context"
"fmt"
awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"

```

```

"github.com/aws/smithy-go/middleware"
smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
    if params == nil {
        params = &CheckInLicenseInput{}
    }

    result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
    if err != nil {
        return nil, err
    }

    out := result.(*CheckInLicenseOutput)
    out.ResultMetadata = metadata
    return out, nil
}

type CheckInLicenseInput struct {

    // License consumption token.
    //
    // This member is required.
    LicenseConsumptionToken *string

    // License beneficiary.
    Beneficiary *string

    noSmithyDocumentSerde
}

type
CheckInLicenseOutput struct {
    // Metadata pertaining to the operation's result.
    ResultMetadata middleware.Metadata

    noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
    if err := stack.Serialize.Add(&setOperationInputMiddleware{ }, middleware.After); err != nil {
        return err
    }
    err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{ }, middleware.After)

```

```

if err != nil {
    return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
if err != nil {
    return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
    return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addLegacyEndpointContextSetter(stack, options); err != nil {
    return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
    return err
}
if err = addClientRequestID(stack); err != nil {
    return err
}
if
err = addComputeContentLength(stack); err != nil {
    return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
    return err
}
if err = addComputePayloadSHA256(stack); err != nil {
    return err
}
if err = addRetry(stack, options); err != nil {
    return err
}
if err = addRawResponseToMetadata(stack); err != nil {
    return err
}
if err = addRecordResponseTiming(stack); err != nil {
    return err
}
if err = addClientUserAgent(stack, options); err != nil {
    return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
}

```

```

if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
    return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
    return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
    return err
}
if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil
{
    return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
    return err
}
if err = addRecursionDetection(stack); err != nil {
    return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
    return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
    return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
    return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
    return err
}
return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
    return &awsmiddleware.RegisterServiceMetadata{
        Region:    region,
        ServiceID: ServiceID,
        OperationName: "CheckInLicense",
    }
}

```

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// Code generated by smithy-go-codegen DO NOT EDIT.

```
package licensemanager
```

```
import (  
    "context"  
    "fmt"  
    awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"  
    "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"  
    "github.com/aws/smithy-go/middleware"  
    smithyhttp "github.com/aws/smithy-go/transport/http"  
)  
  
// Lists the licenses for your account.  
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))  
(*ListLicensesOutput, error) {  
    if params == nil {  
        params = &ListLicensesInput{}  
    }  
  
    result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,  
c.addOperationListLicensesMiddlewares)  
    if err != nil {  
        return nil, err  
    }  
  
    out := result.(*ListLicensesOutput)  
    out.ResultMetadata = metadata  
    return out, nil  
}  
  
type ListLicensesInput struct {
```

```
// Filters to scope the results. The following filters are supported:
```

```

//
// - Beneficiary
//
// - ProductSKU
//
// - Fingerprint
//
// - Status
Filters
[]types.Filter

// Amazon Resource Names (ARNs) of the licenses.
LicenseArns []string

// Maximum number of results to return in a single call.
MaxResults *int32

// Token for the next set of results.
NextToken *string

noSmithyDocumentSerde
}

type ListLicensesOutput struct {

// License details.
Licenses []types.License

// Token for the next set of results.
NextToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
if err := stack.Serialize.Add(&setOperationInputMiddleware{ }, middleware.After); err != nil {
return err
}
err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{ }, middleware.After)
if err != nil {
return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{ }, middleware.After)
if err != nil {
return err
}
}

```

```

}
if err := addProtocolFinalizerMiddlewares(stack,
options, "ListLicenses"); err != nil {
return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addLegacyEndpointContextSetter(stack, options); err != nil {
return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
return err
}
if err = addClientRequestID(stack); err != nil {
return err
}
if err = addComputeContentLength(stack); err != nil {
return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
return err
}
if err = addComputePayloadSHA256(stack); err != nil {
return err
}
if err = addRetry(stack, options); err != nil {
return err
}
if err = addRawResponseToMetadata(stack); err != nil {
return err
}
if err = addRecordResponseTiming(stack); err != nil {
return err
}
if err = addClientUserAgent(stack, options); err != nil {
return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack);
err != nil {
return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
return err
}

```

```

}
if err = addUserAgentRetryMode(stack, options); err != nil {
    return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
    return err
}
if err = addRecursionDetection(stack); err != nil {
    return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
    return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
    return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
    return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
    return err
}
return nil
}

```

```

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
    return &awsmiddleware.RegisterServiceMetadata{
        Region:    region,
        ServiceID:
            ServiceID,
        OperationName: "ListLicenses",
    }
}

```

```

CheckInLicense
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent

```

AddTimeOffsetMiddleware  
 RecursionDetection  
 Finalize stack step  
 ResolveAuthScheme  
 GetIdentity  
 ResolveEndpointV2  
 disableHTTPS  
 ComputePayloadHash  
 Retry  
 RetryMetricsHeader  
 setLegacyContextSigningOptions  
 Signing  
 Deserialize stack step  
 AddRawResponseToMetadata  
 ErrorCloseResponseBody  
 CloseResponseBody  
 ResponseErrorWrapper  
 RequestIDRetriever  
 OperationDeserializer  
 AddTimeOffsetMiddleware  
 RecordResponseTiming  
 RequestResponseLogger  
 {  
   "smithy": "2.0",  
   "shapes": {  
     "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {  
       "type": "structure",  
       "members": {  
         "message": {  
           "target": "smithy.api#String"  
         }  
       },  
       "traits": {  
         "smithy.api#documentation": "<p>You don't have sufficient access to perform this action.</p>",  
         "smithy.api#error": "client"  
       }  
     },  
     "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {  
       "type": "structure",  
       "members": {  
         "DirectoryId": {  
           "target": "smithy.api#String",  
           "traits": {  
             "smithy.api#documentation": "<p>The directory ID for an Active Directory identity provider.</p>"  
           }  
         }  
       },  
       "traits": {

```

    "smithy.api#documentation":
      "<p>Details about an Active Directory identity provider.</p>"
  },
  "com.amazonaws.licensemanagerusersubscriptions#AssociateUser": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerError"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
      }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Associates the user to an EC2 instance to utilize user-based
subscriptions.</p>\n      <note>\n        <p>Your estimated bill for charges on the number of users and related
costs will take 48\n      hours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing
status) in Amazon Web Services Billing. For more information, see <a
href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n
monthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n      </note>",
      "smithy.api#http": {
        "code": 200,
        "method": "POST",
        "uri": "/user/AssociateUser"
      },
      "smithy.api#idempotent": {}
    }
  }
}

```

```

    }
  },
  "com.amazonaws.licenseanagerusersubscriptions#AssociateUserRequest": {
    "type": "structure",
    "members": {
      "Username": {
        "target": "smithy.api#String",
        "traits": {
          "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
          "smithy.api#required": {}
        }
      },
      "InstanceId": {
        "target": "smithy.api#String",
        "traits": {
          "smithy.api#documentation": "<p>The ID of the
EC2 instance, which provides user-based subscriptions.</p>",
          "smithy.api#required": {}
        }
      },
      "IdentityProvider": {
        "target": "com.amazonaws.licenseanagerusersubscriptions#IdentityProvider",
        "traits": {
          "smithy.api#documentation": "<p>The identity provider of the user.</p>",
          "smithy.api#required": {}
        }
      },
      "Domain": {
        "target": "smithy.api#String",
        "traits": {
          "smithy.api#documentation": "<p>The domain name of the user.</p>"
        }
      }
    }
  },
  "com.amazonaws.licenseanagerusersubscriptions#AssociateUserResponse": {
    "type": "structure",
    "members": {
      "InstanceUserSummary": {
        "target": "com.amazonaws.licenseanagerusersubscriptions#InstanceUserSummary",
        "traits": {
          "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
          "smithy.api#required": {}
        }
      }
    }
  },
  "com.amazonaws.licenseanagerusersubscriptions#BoxInteger": {

```



```

    "type": "integer"
  },
  "com.amazonaws.licenseanagerusersubscriptions#ConflictException": {
    "type": "structure",
    "members": {
      "message": {
        "target": "smithy.api#String"
      }
    },
    "traits": {
      "smithy.api#documentation": "<p>The request couldn't be completed because it conflicted with the current
state of the\n  resource.</p>",
      "smithy.api#error": "server"
    }
  },
  "com.amazonaws.licenseanagerusersubscriptions#DeregisterIdentityProvider":
{
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licenseanagerusersubscriptions#DeregisterIdentityProviderRequest"
  },
  "output": {
    "target": "com.amazonaws.licenseanagerusersubscriptions#DeregisterIdentityProviderResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ConflictException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#InternalServerErrorException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ResourceNotFoundException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ServiceQuotaExceededException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ThrottlingException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ValidationException"
    }
  ],
  "traits": {

```

```

    "smithy.api#documentation": "<p>Deregisters the identity provider from providing user-based
subscriptions.</p>",
    "smithy.api#http": {
        "code": 200,
        "method": "POST",
        "uri": "/identity-provider/DeregisterIdentityProvider"
    },
    "smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest": {
    "type": "structure",
    "members": {
        "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
                "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                "smithy.api#required": {}
            }
        },
        "Product": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                "smithy.api#required": {}
            }
        }
    }
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
    "type": "structure",
    "members": {
        "IdentityProviderSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
            "traits": {
                "smithy.api#documentation":
"<p>Metadata that describes the results of an identity provider operation.</p>",
                "smithy.api#required": {}
            }
        }
    }
},
"com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"
    },
    "output": {

```

```

    "target": "com.amazonaws.licenseanagerusersubscriptions#DisassociateUserResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ConflictException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#InternalServerError"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ResourceNotFoundException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ServiceQuotaExceededException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ThrottlingException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Disassociates the user from an EC2 instance providing user-based
subscriptions.</p>",
    "smithy.api#http": {
      "code": 200,
      "method": "POST",
      "uri": "/user/DisassociateUser"
    },
    "smithy.api#idempotent": {}
  }
},
"com.amazonaws.licenseanagerusersubscriptions#DisassociateUserRequest": {
  "type": "structure",
  "members": {
    "Username": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
        "smithy.api#required": {}
      }
    },
    "InstanceId": {

```

```

        "target": "smithy.api#String",
        "traits": {
            "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
            "smithy.api#required": {}
        }
    },
    "IdentityProvider": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
        "traits": {
            "smithy.api#documentation":
"<p>An object that specifies details for the identity provider.</p>",
            "smithy.api#required": {}
        }
    },
    "Domain": {
        "target": "smithy.api#String",
        "traits": {
            "smithy.api#documentation": "<p>The domain name of the user.</p>"
        }
    }
},
"com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse": {
    "type": "structure",
    "members": {
        "InstanceUserSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
            "traits": {
                "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
                "smithy.api#required": {}
            }
        }
    }
},

"com.amazonaws.licensemanagerusersubscriptions#Filter": {
    "type": "structure",
    "members": {
        "Attribute": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The name of an attribute to use as a filter.</p>"
            }
        }
    },
    "Operation": {
        "target": "smithy.api#String",
        "traits": {

```

```

    "smithy.api#documentation": "<p>The type of search (For example, eq, geq, leq)</p>"
  }
},
"Value": {
  "target": "smithy.api#String",
  "traits": {
    "smithy.api#documentation": "<p>Value of the filter.</p>"
  }
}
},
"traits": {
  "smithy.api#documentation": "<p>A filter name and value pair that is used
to return more specific results from a describe\n  operation. Filters can be used to match a set of resources by
specific criteria, such as tags,\n  attributes, or IDs.</p>"
}
},
"com.amazonaws.licenseanagerusersubscriptions#FilterList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licenseanagerusersubscriptions#Filter"
  }
},
"com.amazonaws.licenseanagerusersubscriptions#IdentityProvider": {
  "type": "union",
  "members": {
    "ActiveDirectoryIdentityProvider": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ActiveDirectoryIdentityProvider",
      "traits": {
        "smithy.api#documentation": "<p>An object that details an Active Directory identity provider.</p>"
      }
    }
  }
},
"traits": {
  "smithy.api#documentation":
"<p>Details about an identity provider.</p>"
}
},
"com.amazonaws.licenseanagerusersubscriptions#IdentityProviderSummary": {
  "type": "structure",
  "members": {
    "IdentityProvider": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#IdentityProvider",
      "traits": {
        "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
        "smithy.api#required": {}
      }
    }
  }
},
"Settings": {

```

```

        "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
        "traits": {
            "smithy.api#documentation": "<p>An object that details the registered identity providers product
related configuration\n    settings such as the subnets to provision VPC endpoints.</p>",
            "smithy.api#required":
        }
    },
    "Product": {
        "target": "smithy.api#String",
        "traits": {
            "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
            "smithy.api#required": {}
        }
    },
    "Status": {
        "target": "smithy.api#String",
        "traits": {
            "smithy.api#documentation": "<p>The status of an identity provider.</p>",
            "smithy.api#required": {}
        }
    },
    "FailureMessage": {
        "target": "smithy.api#String",
        "traits": {
            "smithy.api#documentation": "<p>The failure message associated with an identity provider.</p>"
        }
    },
    "traits": {
        "smithy.api#documentation":
"<p>Describes an identity provider.</p>"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceSummary": {
    "type": "structure",
    "members": {
        "InstanceId": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",

```

```

        "smithy.api#required": {}
    },
    "Status": {
        "target": "smithy.api#String",
        "traits": {
            "smithy.api#documentation": "<p>The status
of an EC2 instance resource.</p>",
            "smithy.api#required": {}
        }
    },
    "Products": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#StringList",
        "traits": {
            "smithy.api#documentation": "<p>A list of provided user-based subscription products.</p>",
            "smithy.api#required": {}
        }
    },
    "LastStatusCheckDate": {
        "target": "smithy.api#String",
        "traits": {
            "smithy.api#documentation": "<p>The date of the last status check.</p>"
        }
    },
    "StatusMessage": {
        "target": "smithy.api#String",
        "traits": {
            "smithy.api#documentation": "<p>The status message for an EC2 instance.</p>"
        }
    }
},
"traits": {
    "smithy.api#documentation": "<p>Describes an EC2 instance providing user-based subscriptions.</p>"
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {
    "type": "structure",
    "members": {
        "Username": {
            "target": "smithy.api#String",
            "traits": {

```

```

        "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
        "smithy.api#required": {}
    }
},
"InstanceId": {
    "target": "smithy.api#String",
    "traits":
{
        "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
        "smithy.api#required": {}
    }
},
"IdentityProvider": {
    "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
    "traits": {
        "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
        "smithy.api#required": {}
    }
},
"Status": {
    "target": "smithy.api#String",
    "traits": {
        "smithy.api#documentation": "<p>The status of a user associated with an EC2 instance.</p>",
        "smithy.api#required": {}
    }
},
"StatusMessage": {
    "target": "smithy.api#String",
    "traits": {
        "smithy.api#documentation": "<p>The status message for users of an EC2 instance.</p>"
    }
},
"Domain": {
    "target": "smithy.api#String",
    "traits": {
        "smithy.api#documentation": "<p>The domain name of the user.</p>"
    }
},
"AssociationDate": {
    "target": "smithy.api#String",
    "traits": {
        "smithy.api#documentation": "<p>The date a user was associated with an EC2 instance.</p>"
    }
},
"DisassociationDate": {
    "target": "smithy.api#String",
    "traits": {

```



```

        "smithy.api#documentation": "<p>The date a user was disassociated from an EC2 instance.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Describes users of an EC2 instance providing user-based
subscriptions.</p>"
  }
},
"com.amazonaws.licenseanagerusersubscriptions#InstanceUserSummaryList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licenseanagerusersubscriptions#InstanceUserSummary"
  }
},
"com.amazonaws.licenseanagerusersubscriptions#InternalServerError": {
  "type": "structure",
  "members": {
    "message": {
      "target": "smithy.api#String"
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>An exception occurred with the service.</p>",
    "smithy.api#error": "server"
  }
},
"com.amazonaws.licenseanagerusersubscriptions#LicenseManagerUserSubscriptions": {
  "type": "service",

"version": "2018-05-10",
"operations": [
  {
    "target": "com.amazonaws.licenseanagerusersubscriptions#AssociateUser"
  },
  {
    "target": "com.amazonaws.licenseanagerusersubscriptions#DeregisterIdentityProvider"
  },
  {
    "target": "com.amazonaws.licenseanagerusersubscriptions#DisassociateUser"
  },
  {
    "target": "com.amazonaws.licenseanagerusersubscriptions#ListIdentityProviders"
  },
  {
    "target": "com.amazonaws.licenseanagerusersubscriptions#ListInstances"
  },

```

```

    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ListProductSubscriptions"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ListUserAssociations"
    }
  ],
  {
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#RegisterIdentityProvider"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#StartProductSubscription"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#StopProductSubscription"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#UpdateIdentityProviderSettings"
    }
  }
],
"traits": {
  "aws.api#service": {
    "sdkId": "License Manager User Subscriptions",
    "arnNamespace": "license-manager-user-subscriptions",
    "cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
  },
  "aws.auth#sigv4": {
    "name": "license-manager-user-subscriptions"
  },
  "aws.protocols#restJson1": {},
  "smithy.api#cors": {
    "additionalAllowedHeaders": [
      "*",
      "content-type",
      "x-amz-content-sha256",
      "x-amz-user-agent",
      "x-amzn-platform-id",
      "x-amzn-trace-id",
      "content-length",
      "x-api-key",
      "authorization",
      "x-amz-date",
      "x-amz-security-token",
      "Access-Control-Allow-Headers",
      "Access-Control-Allow-Methods",
      "Access-Control-Allow-Origin"
    ],
    "additionalExposedHeaders": [

```

```

        "x-amzn-errortype",
        "x-amzn-requestid",
        "x-amzn-trace-id"
    ]
},
"smithy.api#documentation": "<p>With License Manager, you can create user-based subscriptions to
utilize licensed software with a per user subscription fee on Amazon EC2 instances.</p>",
"smithy.api#title": "AWS License Manager User Subscriptions",
"smithy.rules#endpointRuleSet": {
    "version": "1.0",
    "parameters": {
        "Region": {
            "builtIn": "AWS::Region",
            "required": false,
            "documentation": "The AWS region used to dispatch the request.",
            "type": "String"
        },
        "UseDualStack": {
            "builtIn": "AWS::UseDualStack",
            "required": true,
            "default": false,
            "documentation": "When true, use the dual-stack
endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
            "type": "Boolean"
        },
        "UseFIPS": {
            "builtIn": "AWS::UseFIPS",
            "required": true,
            "default": false,
            "documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the
configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
            "type": "Boolean"
        },
        "Endpoint": {
            "builtIn": "SDK::Endpoint",
            "required": false,
            "documentation": "Override the endpoint used to send this request",
            "type": "String"
        }
    }
},
"rules": [
    {
        "conditions": [
            {
                "fn": "isSet",
                "argv": [

```

```

        {
            "ref": "Endpoint"
        }
    ]
}
],
"type": "tree",
"rules": [
    {
        "conditions": [
            {
                "fn": "booleanEquals",
                "argv": [
                    {
                        "ref": "UseFIPS"
                    },
                    true
                ]
            }
        ],
        "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
        "type": "error"
    },
    {
        "conditions": [
            {
                "fn": "booleanEquals",
                "argv": [
                    {
                        "ref": "UseDualStack"
                    },
                    true
                ]
            }
        ],
        "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
        "type": "error"
    },
    {
        "conditions": [],
        "endpoint": {
            "url": {
                "ref": "Endpoint"
            },
            "properties": {},
            "headers": {}
        }
    }
]

```

```

    },
    "type": "endpoint"
  }
]
},
{
  "conditions": [
    {
      "fn": "isSet",
      "argv": [
        {
          "ref": "Region"
        }
      ]
    }
  ],
  "type": "tree",
  "rules": [
    {
      "conditions": [
        {
          "fn": "aws.partition",
          "argv": [
            {
              "ref": "Region"
            }
          ]
        },
        "assign": "PartitionResult"
      ]
    },
    "type": "tree",
  ],
  "rules": [
    {
      "conditions": [
        {
          "fn": "booleanEquals",
          "argv": [
            {
              "ref": "UseFIPS"
            },
            true
          ]
        }
      ],
    },
    {
      "fn": "booleanEquals",
      "argv": [

```

```

        {
            "ref": "UseDualStack"
        },
        true
    ]
}
],
"type": "tree",
"rules": [
    {
        "conditions": [
            {
                "fn": "booleanEquals",
                "argv": [
                    true,
                    {
                        "fn": "getAttr",
"argv": [
                            {
                                "ref": "PartitionResult"
                            },
                            "supportsFIPS"
                        ]
                    }
                ],
            },
            {
                "fn": "booleanEquals",
                "argv": [
                    true,
                    {
                        "fn": "getAttr",
"argv": [
                            {
                                "ref": "PartitionResult"
                            },
                            "supportsDualStack"
                        ]
                    }
                ],
            }
        ],
        "type": "tree",
        "rules": [
            {

```

```

"conditions": [],
    "endpoint": {
        "url": "https://license-manager-user-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
        "properties": {},
        "headers": {}
    },
    "type": "endpoint"
}
],
},
{
    "conditions": [],
    "error": "FIPS and DualStack are enabled, but this partition does not support one or
both",
    "type": "error"
}
],
},
{
    "conditions": [
        {
            "fn": "booleanEquals",
            "argv": [
                {
                    "ref": "UseFIPS"
                },
                true
            ]
        }
    ],
    "type": "tree",
}
],
"rules": [
    {
        "conditions": [
            {
                "fn": "booleanEquals",
                "argv": [
                    true,
                    {
                        "fn": "getAttr",
                        "argv": [
                            {
                                "ref": "PartitionResult"
                            },
                            "supportsFIPS"
                        ]
                    }
                ]
            }
        ]
    }
]

```

```

        ]
      }
    ]
  }
],
"type": "tree",
"rules": [
  {
    "conditions": [],
    "endpoint": {
      "url": "https://license-manager-user-subscriptions-
fips.{Region}.{PartitionResult#dnsSuffix}",
      "properties": {},
      "headers": {}
    },
    "type": "endpoint"
  }
],
{
  "conditions": [],
  "error": "FIPS is enabled but this partition does not support FIPS",
  "type": "error"
}
],
{
  "conditions": [
    {
      "fn": "booleanEquals",
      "argv": [
        {
          "ref": "UseDualStack"
        },
        true
      ]
    }
  ],
  "type": "tree",
  "rules": [
    {
      "conditions": [
        {
          "fn": "booleanEquals",
          "argv": [
            true,

```



```

        {
            "fn": "getAttr",
            "argv": [
                {
                    "ref": "PartitionResult"
                },
                "supportsDualStack"
            ]
        }
    ],
    "type": "tree",
    "rules": [
        {
            "conditions": [],
            "endpoint": {
                "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                "properties": {},
                "headers": {}
            },
            "type": "endpoint"
        }
    ],
    {
        "conditions": [],
        "error": "DualStack is enabled but this partition does
not support DualStack",
        "type": "error"
    }
    ],
    {
        "conditions": [],
        "endpoint": {
            "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",
            "properties": {},
            "headers": {}
        },
        "type": "endpoint"
    }
    ]
}

```

```

    ]
  },
  {
    "conditions":
[]
    "error": "Invalid Configuration: Missing Region",
    "type": "error"
  }
]
},
"smithy.rules#endpointTests": {
  "testCases": [
    {
      "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
        }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
        "UseDualStack": true
      }
    },
    {
      "documentation":
"For region us-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions-fips.us-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions.us-east-1.api.aws"
        }
      },
    },
  ]
}

```

```

"params": {
    "Region": "us-east-1",
    "UseFIPS": false,
    "UseDualStack": true
}
},
{
    "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager-user-subscriptions.us-east-1.amazonaws.com"
        }
    },
    "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": false
    }
},
{
    "documentation": "For region cn-north-1 with
FIPS enabled and DualStack enabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager-user-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
        }
    },
    "params": {
        "Region": "cn-north-1",
        "UseFIPS": true,
        "UseDualStack": true
    }
},
{
    "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager-user-subscriptions-fips.cn-north-1.amazonaws.com.cn"
        }
    },
    "params": {
        "Region": "cn-north-1",
        "UseFIPS": true,
        "UseDualStack": false
    }
},

```

```

{
  "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-user-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
    }
  },
  "params": {
    "Region": "cn-north-1",
    "UseFIPS": false,
    "UseDualStack": true
  }
},
{
  "documentation": "For region cn-north-1
with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-user-subscriptions.cn-north-1.amazonaws.com.cn"
    }
  },
  "params": {
    "Region": "cn-north-1",
    "UseFIPS": false,
    "UseDualStack": false
  }
},
{
  "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.api.aws"
    }
  },
  "params": {
    "Region": "us-gov-east-1",
    "UseFIPS": true,
    "UseDualStack": true
  }
},
{
  "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.amazonaws.com"
    }
  },

```

```

    "params": {
      "Region": "us-gov-east-1",
      "UseFIPS": true,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region us-gov-east-1
with FIPS disabled and DualStack enabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-user-subscriptions.us-gov-east-1.api.aws"
      }
    },
    "params": {
      "Region": "us-gov-east-1",
      "UseFIPS": false,
      "UseDualStack": true
    }
  },
  {
    "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-user-subscriptions.us-gov-east-1.amazonaws.com"
      }
    },
    "params": {
      "Region": "us-gov-east-1",
      "UseFIPS": false,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
    "expect": {
      "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
    },
    "params": {
      "Region": "us-iso-east-1",
      "UseFIPS": true,
      "UseDualStack": true
    }
  },
  {
    "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
    "expect":

```

```

{
    "endpoint": {
        "url": "https://license-manager-user-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
    }
},
"params": {
    "Region": "us-iso-east-1",
    "UseFIPS": true,
    "UseDualStack": false
}
},
{
    "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
    "expect": {
        "error": "DualStack is enabled but this partition does not support DualStack"
    },
    "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": false,
        "UseDualStack":
true
    }
},
{
    "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager-user-subscriptions.us-iso-east-1.c2s.ic.gov"
        }
    },
    "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": false,
        "UseDualStack": false
    }
},
{
    "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
    "expect": {
        "error": "FIPS and DualStack are enabled, but
this partition does not support one or both"
    },
    "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": true,
        "UseDualStack": true
    }
},
}

```

```

    {
      "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
        }
      },
      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
      "expect": {
        "error": "DualStack is enabled but this partition does not support DualStack"
      },
      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": false,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions.us-isob-east-1.sc2s.sgov.gov"
        }
      },
      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
      "expect": {
        "endpoint": {
          "url": "https://example.com"
        }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
    
```

```

    "UseDualStack": false,
    "Endpoint": "https://example.com"
  }
},
{

```

"documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",

```

  "expect": {
    "endpoint": {
      "url": "https://example.com"
    }
  },
  "params": {
    "UseFIPS": false,
    "UseDualStack": false,
    "Endpoint": "https://example.com"
  }
},
{

```

"documentation": "For custom endpoint with fips enabled and dualstack disabled",

```

  "expect": {
    "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
  },
  "params": {
    "Region": "us-east-1",
    "UseFIPS": true,
    "UseDualStack": false,
    "Endpoint": "https://example.com"
  }
},
{

```

"documentation": "For custom endpoint with fips disabled and dualstack enabled",

```

  "expect": {
    "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
  },
  "params": {
    "Region": "us-east-1",
    "UseFIPS": false,
    "UseDualStack": true,
    "Endpoint": "https://example.com"
  }
},
{

```

"documentation": "Missing region",

```

  "expect": {
    "error": "Invalid Configuration: Missing Region"
  }
}

```



```

    ],
    "version": "1.0"
  }
}
},
"com.amazonaws.licenseanagerusersubscriptions#ListIdentityProviders": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licenseanagerusersubscriptions#ListIdentityProvidersRequest"
  },
  "output": {
    "target": "com.amazonaws.licenseanagerusersubscriptions#ListIdentityProvidersResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ConflictException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#InternalServerErrorException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ResourceNotFoundException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ServiceQuotaExceededException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ThrottlingException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Lists the identity providers for user-based subscriptions.</p>",
    "smithy.api#http": {
      "code": 200,
      "method": "POST",
      "uri": "/identity-provider/ListIdentityProviders"
    },
    "smithy.api#paginated":
  }
}

```

```

        "items": "IdentityProviderSummaries"
    }
}
},
"com.amazonaws.licenseanagerusersubscriptions#ListIdentityProvidersRequest": {
    "type": "structure",
    "members": {
        "MaxResults": {
            "target": "com.amazonaws.licenseanagerusersubscriptions#BoxInteger",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        },
        "NextToken": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    }
},
"com.amazonaws.licenseanagerusersubscriptions#ListIdentityProvidersResponse":
{
    "type": "structure",
    "members": {
        "IdentityProviderSummaries": {
            "target": "com.amazonaws.licenseanagerusersubscriptions#IdentityProviderSummaryList",
            "traits": {
                "smithy.api#documentation": "<p>Metadata that describes the list identity providers operation.</p>",
                "smithy.api#required": {}
            }
        },
        "NextToken": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    }
},
"com.amazonaws.licenseanagerusersubscriptions#ListInstances": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licenseanagerusersubscriptions#ListInstancesRequest"
    },
    "output": {
        "target": "com.amazonaws.licenseanagerusersubscriptions#ListInstancesResponse"
    },
}

```

```

"errors": [
  {
    "target": "com.amazonaws.licenseanagerusersubscriptions#AccessDeniedException"
  },
  {
    "target": "com.amazonaws.licenseanagerusersubscriptions#ConflictException"
  },
  {
    "target": "com.amazonaws.licenseanagerusersubscriptions#InternalServerErrorException"
  },
  {
    "target": "com.amazonaws.licenseanagerusersubscriptions#ResourceNotFoundException"
  },
  {
    "target": "com.amazonaws.licenseanagerusersubscriptions#ServiceQuotaExceededException"
  },
  {
    "target": "com.amazonaws.licenseanagerusersubscriptions#ThrottlingException"
  },
  {
    "target": "com.amazonaws.licenseanagerusersubscriptions#ValidationException"
  }
],
"traits": {
  "smithy.api#documentation": "<p>Lists the EC2 instances providing user-based subscriptions.</p>",
  "smithy.api#http": {
    "code": 200,
    "method": "POST",
    "uri": "/instance/ListInstances"
  },
  "smithy.api#paginated": {
    "inputToken": "NextToken",
    "outputToken": "NextToken",
    "pageSize": "MaxResults",
    "items": "InstanceSummaries"
  }
}
},
"com.amazonaws.licenseanagerusersubscriptions#ListInstancesRequest": {
  "type": "structure",
  "members": {
    "MaxResults": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#BoxInteger",
      "traits": {
        "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
      }
    },
    "NextToken": {

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    "target": "smithy.api#String",
    "traits": {
      "smithy.api#documentation": "<p>Token for the next set of results.</p>"
    }
  },
  "Filters": {
    "target": "com.amazonaws.licenseanagerusersubscriptions#FilterList",
    "traits": {
      "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those
that match one or\n    more sets of key-value pairs that you specify.</p>"
    }
  }
},
"com.amazonaws.licenseanagerusersubscriptions#ListInstancesResponse": {
  "type":
"structure",
  "members": {
    "InstanceSummaries": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#InstanceSummaryList",
      "traits": {
        "smithy.api#documentation": "<p>Metadata that describes the list instances operation.</p>"
      }
    },
    "NextToken": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    }
  }
},
"com.amazonaws.licenseanagerusersubscriptions#ListProductSubscriptions": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licenseanagerusersubscriptions#ListProductSubscriptionsRequest"
  },
  "output": {
    "target": "com.amazonaws.licenseanagerusersubscriptions#ListProductSubscriptionsResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ConflictException"
    }
  ]
}

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    "target": "com.amazonaws.licenseanagerusersubscriptions#InternalServerErrorException"
  },
  {
    "target": "com.amazonaws.licenseanagerusersubscriptions#ResourceNotFoundException"
  },
  {
    "target": "com.amazonaws.licenseanagerusersubscriptions#ServiceQuotaExceededException"
  },
  {
    "target": "com.amazonaws.licenseanagerusersubscriptions#ThrottlingException"
  },
  {
    "target": "com.amazonaws.licenseanagerusersubscriptions#ValidationException"
  }
],
"traits": {
  "smithy.api#documentation": "<p>Lists the user-based subscription products available from an identity
provider.</p>",
  "smithy.api#http": {
    "code": 200,
    "method": "POST",
    "uri": "/user/ListProductSubscriptions"
  },
  "smithy.api#paginated": {
    "inputToken": "NextToken",
    "outputToken": "NextToken",
    "pageSize": "MaxResults",
    "items": "ProductUserSummaries"
  }
},
"com.amazonaws.licenseanagerusersubscriptions#ListProductSubscriptionsRequest": {
  "type": "structure",
  "members": {
    "Product": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The name
of the user-based subscription product.</p>",
        "smithy.api#required": {}
      }
    },
    "IdentityProvider": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#IdentityProvider",
      "traits": {
        "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
        "smithy.api#required": {}
      }
    }
  }
}

```

```

    },
    "MaxResults": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#BoxInteger",
      "traits": {
        "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
      }
    },
    "Filters": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#FilterList",
      "traits": {

"smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those that match
one or\n more sets of key-value pairs that you specify.</p>"
      }
    },
    "NextToken": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    }
  },
  "com.amazonaws.licenseanagerusersubscriptions#ListProductSubscriptionsResponse": {
    "type": "structure",
    "members": {
      "ProductUserSummaries": {
        "target": "com.amazonaws.licenseanagerusersubscriptions#ProductUserSummaryList",
        "traits": {
          "smithy.api#documentation": "<p>Metadata that describes the list product subscriptions
operation.</p>"
        }
      }
    }
  },
  "NextToken": {
    "target": "smithy.api#String",
    "traits": {
      "smithy.api#documentation": "<p>Token for the next set of results.</p>"
    }
  }
},
"com.amazonaws.licenseanagerusersubscriptions#ListUserAssociations": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licenseanagerusersubscriptions#ListUserAssociationsRequest"
  },
  "output": {

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    "target": "com.amazonaws.licenseanagerusersubscriptions#ListUserAssociationsResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ConflictException"
    },
    {
      "target":
"com.amazonaws.licenseanagerusersubscriptions#InternalServerError"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ResourceNotFoundException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ServiceQuotaExceededException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ThrottlingException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Lists user associations for an identity provider.</p>",
    "smithy.api#http": {
      "code": 200,
      "method": "POST",
      "uri": "/user/ListUserAssociations"
    },
    "smithy.api#paginated":
{
  "inputToken": "NextToken",
  "outputToken": "NextToken",
  "pageSize": "MaxResults",
  "items": "InstanceUserSummaries"
}
  }
},
"com.amazonaws.licenseanagerusersubscriptions#ListUserAssociationsRequest": {
  "type": "structure",
  "members": {
    "InstanceId": {
      "target": "smithy.api#String",
      "traits": {

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        "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
        "smithy.api#required": {}
    },
    "IdentityProvider": {
        "target": "com.amazonaws.licenseanagerusersubscriptions#IdentityProvider",
        "traits": {
            "smithy.api#documentation": "<p>An object that specifies details for the identity
provider.</p>",
            "smithy.api#required": {}
        }
    },
    "MaxResults": {
        "target": "com.amazonaws.licenseanagerusersubscriptions#BoxInteger",
        "traits": {
            "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
        }
    },
    "Filters": {
        "target": "com.amazonaws.licenseanagerusersubscriptions#FilterList",
        "traits": {
            "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those
that match one or\n    more sets of key-value pairs that you specify.</p>"
        }
    },
    "NextToken": {
        "target": "smithy.api#String",
        "traits": {
            "smithy.api#documentation": "<p>Token for
the next set of results.</p>"
        }
    }
},
"com.amazonaws.licenseanagerusersubscriptions#ListUserAssociationsResponse": {
    "type": "structure",
    "members": {
        "InstanceUserSummaries": {
            "target": "com.amazonaws.licenseanagerusersubscriptions#InstanceUserSummaryList",
            "traits": {
                "smithy.api#documentation": "<p>Metadata that describes the list user association operation.</p>"
            }
        },
        "NextToken": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    }
}

```



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    }
  }
},
"com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {
  "type": "structure",
  "members": {
    "Username": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The user name from the identity provider of the user.</p>",
        "smithy.api#required": {}
      }
    },
    "Product": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
        "smithy.api#required": {}
      }
    },
    "IdentityProvider": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
      "traits": {
        "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
        "smithy.api#required": {}
      }
    }
  },
  "Status": {
    "target": "smithy.api#String",
    "traits": {
      "smithy.api#documentation": "<p>The status of a product for a user.</p>",
      "smithy.api#required": {}
    }
  },
  "StatusMessage": {
    "target": "smithy.api#String",
    "traits": {
      "smithy.api#documentation": "<p>The status message for a product for a user.</p>"
    }
  },
  "Domain": {
    "target": "smithy.api#String",
    "traits": {
      "smithy.api#documentation": "<p>The domain name of the user.</p>"
    }
  }
}

```

```

    },
    "SubscriptionStartDate": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The
start date of a subscription.</p>"
      }
    },
    "SubscriptionEndDate": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The end date of a subscription.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>The summary of the user-based subscription products for a user.</p>"
  }
},
"com.amazonaws.licenseanagerusersubscriptions#ProductUserSummaryList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licenseanagerusersubscriptions#ProductUserSummary"
  }
},
"com.amazonaws.licenseanagerusersubscriptions#RegisterIdentityProvider": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licenseanagerusersubscriptions#RegisterIdentityProviderRequest"
  },
  "output": {
    "target": "com.amazonaws.licenseanagerusersubscriptions#RegisterIdentityProviderResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ConflictException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#InternalServerErrorException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ResourceNotFoundException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ServiceQuotaExceededException"
    }
  ]
}

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    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ThrottlingException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Registers an identity provider for user-based subscriptions.</p>",
    "smithy.api#http": {
      "code": 200,
      "method": "POST",
      "uri": "/identity-provider/RegisterIdentityProvider"
    },
    "smithy.api#idempotent": {}
  }
},
"com.amazonaws.licenseanagerusersubscriptions#RegisterIdentityProviderRequest": {
  "type": "structure",
  "members": {
    "IdentityProvider": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#IdentityProvider",
      "traits": {
        "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
        "smithy.api#required": {}
      }
    },
    "Product": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
        "smithy.api#required": {}
      }
    }
  },
  "Settings": {
    "target": "com.amazonaws.licenseanagerusersubscriptions#Settings",
    "traits": {
      "smithy.api#documentation": "<p>The registered identity providers product related configuration settings such as the\n  subnets to provision VPC endpoints.</p>"
    }
  }
},
"com.amazonaws.licenseanagerusersubscriptions#RegisterIdentityProviderResponse": {
  "type": "structure",
  "members": {

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    "IdentityProviderSummary":
    {
        "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
        "traits": {
            "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider
operation.</p>",
            "smithy.api#required": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The resource couldn't be found.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 404
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 5,
                "max": 200
            },
            "smithy.api#pattern": "^sg-([0-9a-z]{8})([0-9a-z]{17})$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The request failed because a service quota is exceeded.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Settings": {

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```

"type": "structure",
"members": {
  "Subnets": {
    "target": "com.amazonaws.licenseanagerusersubscriptions#Subnets",
    "traits": {
      "smithy.api#documentation":
"<p>The subnets defined for the registered identity provider.</p>",
      "smithy.api#length": {
        "min": 1
      },
      "smithy.api#required": {}
    }
  },
  "SecurityGroupId": {
    "target": "com.amazonaws.licenseanagerusersubscriptions#SecurityGroup",
    "traits": {
      "smithy.api#documentation": "<p>A security group ID that allows inbound TCP port 1688
communication between resources in\n  your VPC and the VPC endpoint for activation servers.</p>",
      "smithy.api#required": {}
    }
  }
},
"traits": {
  "smithy.api#documentation": "<p>The registered identity providers product related configuration settings
such as the\n  subnets to provision VPC endpoints, and the security group ID that
is associated with the VPC\n  endpoints. The security group should permit inbound TCP port 1688
communication from resources\n  in the VPC.</p>"
}
},
"com.amazonaws.licenseanagerusersubscriptions#StartProductSubscription": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licenseanagerusersubscriptions#StartProductSubscriptionRequest"
  },
  "output": {
    "target": "com.amazonaws.licenseanagerusersubscriptions#StartProductSubscriptionResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ConflictException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#InternalServerError"
    }
  ]
}

```

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    "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
  },
  {
    "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
  },
  {
    "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
  },
  {
    "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
  }
],
"traits": {
  "smithy.api#documentation": "<p>Starts a product subscription for a user with the specified identity provider.</p>\n    <note>\n      <p>Your estimated bill for charges on the number of users and related costs will take 48\n      hours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing status) in Amazon Web Services Billing.\n      For more information, see <a href=\\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n      monthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n    </note>",
  "smithy.api#http": {
    "code": 200,
    "method": "POST",
    "uri": "/user/StartProductSubscription"
  }
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {
  "type": "structure",
  "members": {
    "Username": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The user name from the identity provider of the user.</p>",
        "smithy.api#required": {}
      }
    },
    "IdentityProvider": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
      "traits": {
        "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
        "smithy.api#required": {}
      }
    }
  },
  "Product": {
    "target": "smithy.api#String",
    "traits": {
      "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",

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        "smithy.api#required": {}
    },
    "Domain": {
        "target": "smithy.api#String",
        "traits": {
            "smithy.api#documentation": "<p>The domain name of the user.</p>"
        }
    }
},
"com.amazonaws.licenseanagerusersubscriptions#StartProductSubscriptionResponse": {
    "type": "structure",
    "members": {
        "ProductUserSummary": {
            "target": "com.amazonaws.licenseanagerusersubscriptions#ProductUserSummary",
            "traits": {
                "smithy.api#documentation": "<p>Metadata that describes the start product subscription operation.</p>",
                "smithy.api#required": {}
            }
        }
    }
},
"com.amazonaws.licenseanagerusersubscriptions#StopProductSubscription": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licenseanagerusersubscriptions#StopProductSubscriptionRequest"
    },
    "output": {
        "target": "com.amazonaws.licenseanagerusersubscriptions#StopProductSubscriptionResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licenseanagerusersubscriptions#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licenseanagerusersubscriptions#ConflictException"
        },
        {
            "target": "com.amazonaws.licenseanagerusersubscriptions#InternalServerErrorException"
        },
        {
            "target": "com.amazonaws.licenseanagerusersubscriptions#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licenseanagerusersubscriptions#ServiceQuotaExceededException"
        }
    ]
},

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    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ThrottlingException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Stops a product subscription for a user with the specified identity provider.</p>",
    "smithy.api#http": {
      "code": 200,
      "method": "POST",
      "uri": "/user/StopProductSubscription"
    }
  }
},
"com.amazonaws.licenseanagerusersubscriptions#StopProductSubscriptionRequest": {
  "type": "structure",
  "members": {
    "Username": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
        "smithy.api#required": {}
      }
    },
    "IdentityProvider": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#IdentityProvider",
      "traits": {
        "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
        "smithy.api#required": {}
      }
    }
  },
  "Product": {
    "target": "smithy.api#String",
    "traits": {
      "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
      "smithy.api#required": {}
    }
  },
  "Domain": {
    "target": "smithy.api#String",
    "traits": {
      "smithy.api#documentation": "<p>The domain name of the user.</p>"
    }
  }
}

```



```

    }
  }
},
"com.amazonaws.licenseanagerusersubscriptions#StopProductSubscriptionResponse": {
  "type": "structure",
  "members": {
    "ProductUserSummary": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ProductUserSummary",
      "traits": {
        "smithy.api#documentation":
"<p>Metadata that describes the start product subscription operation.</p>",
        "smithy.api#required": {}
      }
    }
  }
},
"com.amazonaws.licenseanagerusersubscriptions#StringList": {
  "type": "list",
  "member": {
    "target": "smithy.api#String"
  }
},
"com.amazonaws.licenseanagerusersubscriptions#Subnet": {
  "type": "string",
  "traits": {
    "smithy.api#pattern": "subnet-[a-z0-9]{8,17}"
  }
},
"com.amazonaws.licenseanagerusersubscriptions#Subnets": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licenseanagerusersubscriptions#Subnet"
  }
},
"com.amazonaws.licenseanagerusersubscriptions#ThrottlingException": {
  "type": "structure",
  "members": {
    "message": {
      "target": "smithy.api#String"
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>The request was denied because of request throttling. Retry the
request.</p>",
    "smithy.api#error": "client"
  }
},

```

```

"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerErrorException"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Updates additional product configuration settings for the registered identity\n  provider.</p>",
    "smithy.api#http": {
      "code": 200,
      "method": "POST",
      "uri": "/identity-provider/UpdateIdentityProviderSettings"
    },
    "smithy.api#idempotent": {}
  }
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
  "type": "structure",
  "members": {
    "IdentityProvider": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
      "traits": {
        "smithy.api#required": {}
      }
    },
    "Product": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
        "smithy.api#required": {}
      }
    }
  }
}

```

```

    },
    "UpdateSettings": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings",
      "traits": {
        "smithy.api#documentation": "<p>Updates the registered identity providers product related
configuration settings. You can\n    update any combination of settings in a single operation such as the:</p>\n
<ul>\n    <li>\n        <p>Subnets which you want to add to provision VPC endpoints.</p>\n        </li>\n
<li>\n        <p>Subnets which you want to remove the VPC endpoints from.</p>\n        </li>\n
<li>\n        <p>Security group ID which permits traffic to the VPC endpoints.</p>\n        </li>\n    </ul>",
        "smithy.api#required": {}
      }
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse": {
    "type": "structure",
    "members": {
      "IdentityProviderSummary": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
        "traits": {
          "smithy.api#required": {}
        }
      }
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings": {
    "type": "structure",
    "members": {
      "AddSubnets": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
        "traits": {
          "smithy.api#documentation": "<p>The ID of one or more subnets in which License Manager will
create a VPC endpoint for products that\n    require connectivity to activation servers.</p>",
          "smithy.api#required": {}
        }
      },
      "RemoveSubnets": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
        "traits": {
          "smithy.api#documentation": "<p>The ID of one or more subnets to remove.</p>",
          "smithy.api#required": {}
        }
      }
    }
  },
  "SecurityGroupId": {
    "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
    "traits": {
      "smithy.api#documentation": "<p>A security group ID

```

that allows inbound TCP port 1688 communication between resources in your VPC and the VPC endpoints for activation servers.

```
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Updates the registered identity providers product related configuration settings such as the subnets to provision VPC endpoints.</p>"
  },
  "com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
    "type": "structure",
    "members": {
      "message": {
        "target": "smithy.api#String"
      }
    },
    "traits": {
      "smithy.api#documentation": "<p>A parameter is not valid.</p>",
      "smithy.api#error": "client"
    }
  }
}
{
  "smithy": "2.0",
  "metadata": {
    "suppressions": [
      {
        "id": "HttpMethodSemantics",
        "namespace": "*"
      },
      {
        "id": "HttpStatusCodeSemantics",
        "namespace": "*"
      },
      {
        "id": "PaginatedTrait",
        "namespace": "*"
      },
      {
        "id": "HttpHeaderTrait",
        "namespace": "*"
      },
      {
        "id": "HttpUriConflict",
        "namespace": "*"
      }
    ]
  }
}
```

```

    {
      "id": "Service",
      "namespace": "*"
    }
  ]
},
"shapes": {
  "com.amazonaws.licensemanager#AWSLicenseManager": {
    "type": "service",
    "version": "2018-08-01",
    "operations": [
      {
        "target": "com.amazonaws.licensemanager#AcceptGrant"
      },
      {
        "target": "com.amazonaws.licensemanager#CheckInLicense"
      },
      {
        "target": "com.amazonaws.licensemanager#CheckoutBorrowLicense"
      },
      {
        "target": "com.amazonaws.licensemanager#CheckoutLicense"
      },
      {
        "target": "com.amazonaws.licensemanager#CreateGrant"
      },
      {
        "target": "com.amazonaws.licensemanager#CreateGrantVersion"
      },
      {
        "target": "com.amazonaws.licensemanager#CreateLicense"
      },
      {
        "target": "com.amazonaws.licensemanager#CreateLicenseConfiguration"
      },
      {
        "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource"
      },
      {
        "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator"
      },
      {
        "target": "com.amazonaws.licensemanager#CreateLicenseVersion"
      },
      {
        "target": "com.amazonaws.licensemanager#CreateToken"
      },
    ]
  }
}

```

```
{
  "target": "com.amazonaws.licensemanager#DeleteGrant"
},
{
  "target": "com.amazonaws.licensemanager#DeleteLicense"
},
{
  "target": "com.amazonaws.licensemanager#DeleteLicenseConfiguration"
},
{
  "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator"
},
{
  "target": "com.amazonaws.licensemanager#DeleteToken"
},
{
  "target": "com.amazonaws.licensemanager#ExtendLicenseConsumption"
},
},
{
  "target": "com.amazonaws.licensemanager#GetAccessToken"
},
{
  "target": "com.amazonaws.licensemanager#GetGrant"
},
{
  "target": "com.amazonaws.licensemanager#GetLicense"
},
{
  "target": "com.amazonaws.licensemanager#GetLicenseConfiguration"
},
{
  "target": "com.amazonaws.licensemanager#GetLicenseConversionTask"
},
{
  "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGenerator"
},
{
  "target": "com.amazonaws.licensemanager#GetLicenseUsage"
},
{
  "target": "com.amazonaws.licensemanager#GetServiceSettings"
},
{
  "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration"
},
{
  "target": "com.amazonaws.licensemanager#ListDistributedGrants"
}
```

```
},
{
  "target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations"
},
{
  "target": "com.amazonaws.licensemanager#ListLicenseConfigurations"
},
{
  "target": "com.amazonaws.licensemanager#ListLicenseConversionTasks"
},
{
  "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators"
},
{
  "target": "com.amazonaws.licensemanager#ListLicenses"
},
{
  "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResource"
},
{
  "target": "com.amazonaws.licensemanager#ListLicenseVersions"
},
{
  "target": "com.amazonaws.licensemanager#ListReceivedGrants"
},
{
  "target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganization"
},
{
  "target": "com.amazonaws.licensemanager#ListReceivedLicenses"
},
{
  "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganization"
},
{
  "target": "com.amazonaws.licensemanager#ListResourceInventory"
},
{
  "target": "com.amazonaws.licensemanager#ListTagsForResource"
},
{
  "target": "com.amazonaws.licensemanager#ListTokens"
},
{
  "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfiguration"
},
{
```

```

    "target": "com.amazonaws.licensemanager#RejectGrant"
  },
  {
    "target": "com.amazonaws.licensemanager#TagResource"
  },
  {
    "target": "com.amazonaws.licensemanager#UntagResource"
  },
  {
    "target": "com.amazonaws.licensemanager#UpdateLicenseConfiguration"
  },
  {
    "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator"
  },
  {
    "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource"
  },
  {
    "target": "com.amazonaws.licensemanager#UpdateServiceSettings"
  }
],
"traits": {
  "aws.api#service": {
    "sdkId": "License Manager",
    "arnNamespace": "license-manager",
    "cloudFormationName": "LicenseManager",
    "cloudTrailEventSource": "licensemanager.amazonaws.com",
    "endpointPrefix": "license-manager"
  },
  "aws.auth#sigv4": {
    "name": "license-manager"
  },
  "aws.protocols#awsJson1_1": {},
  "smithy.api#documentation": "<p>License Manager makes it easier to manage licenses from software vendors across multiple \n      Amazon Web Services accounts and on-premises servers.</p>",
  "smithy.api#title": "AWS License Manager",
  "smithy.api#xmlNamespace": {
    "uri": "https://license-manager.amazonaws.com/doc/2018_08_01"
  },
  "smithy.rules#endpointRuleSet": {
    "version": "1.0",
    "parameters": {
      "Region": {
        "builtIn": "AWS::Region",
        "required": false,
        "documentation": "The AWS region used to dispatch the request.",
        "type": "String"
      }
    }
  },

```



```

    "UseDualStack": {
      "builtIn": "AWS::UseDualStack",
      "required": true,
      "default": false,
      "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not
support dual-stack, dispatching the request MAY return an error.",
      "type": "Boolean"
    },
    "UseFIPS": {
      "builtIn": "AWS::UseFIPS",
      "required": true,
      "default": false,
      "documentation": "When true, send
this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant
endpoint, dispatching the request will return an error.",
      "type": "Boolean"
    },
    "Endpoint": {
      "builtIn": "SDK::Endpoint",
      "required": false,
      "documentation": "Override the endpoint used to send this request",
      "type": "String"
    }
  },
  "rules": [
    {
      "conditions": [
        {
          "fn": "isSet",
          "argv": [
            {
              "ref": "Endpoint"
            }
          ]
        }
      ]
    }
  ],
  "type": "tree",
  "rules": [
    {
      "conditions": [
        {
          "fn": "booleanEquals",
          "argv": [
            {
              "ref": "UseFIPS"
            },
            true
          ]
        }
      ]
    }
  ]
}

```

```

        ]
    }
],
"error": "Invalid Configuration: FIPS and custom endpoint are not supported",
"type": "error"
},
{
"conditions": [
    {
        "fn": "booleanEquals",
        "argv": [
            {
                "ref": "UseDualStack"
            },
            true
        ]
    }
],
"error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
"type": "error"
},
{
"conditions": [],
"endpoint": {
    "url": {
        "ref": "Endpoint"
    },
    "properties": {},
    "headers": {}
},
"type": "endpoint"
}
],
},
{
"conditions": [
    {
        "fn": "isSet",
        "argv": [
            {
                "ref": "Region"
            }
        ]
    }
],
},
"type": "tree",
"rules": [

```

"UseFIPS"

```
{
  "conditions": [
    {
      "fn": "aws.partition",
      "argv": [
        {
          "ref": "Region"
        }
      ],
      "assign": "PartitionResult"
    }
  ],
  "type": "tree",
  "rules": [
    {
      "conditions": [
        {
          "fn": "booleanEquals",
          "argv": [
            {
              "ref":
                "UseFIPS",
            },
            true
          ]
        },
        {
          "fn": "booleanEquals",
          "argv": [
            {
              "ref": "UseDualStack"
            },
            true
          ]
        }
      ],
      "type": "tree",
      "rules": [
        {
          "conditions": [
            {
              "fn": "booleanEquals",
              "argv": [
                true,
                {
                  "fn": "getAttr",
                  "argv": [
                    {
```

```

        "ref": "PartitionResult"
      },
      "supportsFIPS"
    ]
  }
  ],
  },
  {
    "fn": "booleanEquals",
    "argv": [
      true,
      {
        "fn": "getAttr",
        "argv": [
          {
            "ref": "PartitionResult"
          },
        ],
      }
    ],
    "supportsDualStack"
  ]
  }
  ],
  },
  "type": "tree",
  "rules": [
    {
      "conditions": [],
      "endpoint": {
        "url": "https://license-manager-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
        "properties": {},
        "headers": {}
      },
    },
    {
      "type": "endpoint"
    }
  ],
  },
  {
    "conditions": [],
    "error": "FIPS and DualStack are enabled, but this partition does not support one or
both",
    "type": "error"
  }
  ],
  },

```

```

{
  "conditions": [
    {
      "fn": "booleanEquals",

      "argv": [
        {
          "ref": "UseFIPS"
        },
        true
      ]
    }
  ],
  "type": "tree",
  "rules": [
    {
      "conditions": [
        {
          "fn": "booleanEquals",
          "argv": [
            true,

            {
              "fn": "getAttr",
              "argv": [
                {
                  "ref": "PartitionResult"
                },
                "supportsFIPS"
              ]
            }
          ]
        }
      ],
      "type": "tree",
      "rules": [

        {
          "conditions": [],
          "endpoint": {
            "url": "https://license-manager-fips.{Region}.{PartitionResult#dnsSuffix}",
            "properties": {},
            "headers": {}
          },
          "type": "endpoint"
        }
      ]
    },
  ],
}

```

```

        {
            "conditions": [],
            "error": "FIPS is enabled but this
partition does not support FIPS",
            "type": "error"
        }
    ],
},
{
    "conditions": [
        {
            "fn": "booleanEquals",
            "argv": [
                {
                    "ref": "UseDualStack"
                },
                true
            ]
        }
    ],
    "type": "tree",
    "rules": [
        {
            "conditions": [
                {
                    "fn": "booleanEquals",
                    "argv": [
                        true,
                        {
                            "fn": "getAttr",
                            "argv": [
                                {
                                    "ref": "PartitionResult"
                                }
                            ]
                        }
                    ]
                }
            ]
        }
    ],
    "type": "tree",
    "rules": [
        {
            "conditions": [],
            "endpoint": {
                "url": "https://license-
manager.{Region}.{PartitionResult#dualStackDnsSuffix}",

```

```

        "properties": {},
        "headers": {}
    },
    {
        "type": "endpoint"
    }
]
},
{
    "conditions": [],
    "error": "DualStack is enabled but this partition does not support DualStack",
    "type": "error"
}
]
},
{
    "conditions": [],
    "endpoint": {
        "url": "https://license-manager.{Region}.{PartitionResult#dnsSuffix}",
        "properties": {},
        "headers": {}
    },
    "type": "endpoint"
}
]
}
],
},
{
    "conditions": [],
    "error": "Invalid Configuration: Missing Region",
    "type": "error"
}
]
},
"smithy.rules#endpointTests": {
    "testCases": [
        {
            "documentation": "For region af-south-1 with FIPS disabled and DualStack disabled",
            "expect": {
                "endpoint":
{
                    "url": "https://license-manager.af-south-1.amazonaws.com"
                }
            },
            "params": {
                "Region": "af-south-1",
                "UseFIPS": false,

```

```

    "UseDualStack": false
  }
},
{
  "documentation": "For region ap-east-1 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.ap-east-1.amazonaws.com"
    }
  },
  "params": {
    "Region": "ap-east-1",
    "UseFIPS": false,
    "UseDualStack": false
  }
},
{
  "documentation": "For region ap-northeast-1 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.ap-northeast-1.amazonaws.com"
    }
  },
  "params": {
    "Region": "ap-northeast-1",
    "UseFIPS": false,
    "UseDualStack": false
  }
},
{
  "documentation": "For region ap-northeast-2 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.ap-northeast-2.amazonaws.com"
    }
  },
  "params": {
    "Region": "ap-northeast-2",
    "UseFIPS": false,
    "UseDualStack": false
  }
},
{
  "documentation": "For region ap-northeast-3 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.ap-northeast-3.amazonaws.com"
    }
  }
}

```



```

    },
    "params": {
      "Region": "ap-northeast-3",
      "UseFIPS": false,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region ap-south-1 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager.ap-south-1.amazonaws.com"
      }
    },
    "params": {
      "Region": "ap-south-1",
      "UseFIPS": false,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region ap-southeast-1 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager.ap-southeast-1.amazonaws.com"
      }
    }
  },
  {
    "params": {
      "Region": "ap-southeast-1",
      "UseFIPS": false,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region ap-southeast-2 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager.ap-southeast-2.amazonaws.com"
      }
    },
    "params": {
      "Region": "ap-southeast-2",
      "UseFIPS": false,
      "UseDualStack": false
    }
  },
}

```

```

{
  "documentation": "For region ap-southeast-3 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.ap-southeast-3.amazonaws.com"
    }
  },
  "params": {
    "Region": "ap-southeast-3",
    "UseFIPS": false,
    "UseDualStack": false
  }
},
{
  "documentation": "For region ca-central-1 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.ca-central-1.amazonaws.com"
    }
  },
  "params": {
    "Region": "ca-central-1",
    "UseFIPS": false,
    "UseDualStack": false
  }
},
{
  "documentation": "For region eu-central-1 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.eu-central-1.amazonaws.com"
    }
  },
  "params": {
    "Region": "eu-central-1",
    "UseFIPS": false,
    "UseDualStack": false
  }
},
{
  "documentation": "For region eu-north-1 with FIPS
disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.eu-north-1.amazonaws.com"
    }
  }
}

```

```

    },
    "params": {
      "Region": "eu-north-1",
      "UseFIPS": false,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region eu-south-1 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager.eu-south-1.amazonaws.com"
      }
    },
    "params": {
      "Region":
"eu-south-1",
      "UseFIPS": false,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region eu-west-1 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager.eu-west-1.amazonaws.com"
      }
    },
    "params": {
      "Region": "eu-west-1",
      "UseFIPS": false,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region eu-west-2 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager.eu-west-2.amazonaws.com"
      }
    },
    "params": {
      "Region": "eu-west-2",
      "UseFIPS": false,
      "UseDualStack": false
    }
  },

```

```

    {
      "documentation": "For region eu-west-3 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.eu-west-3.amazonaws.com"
        }
      },
      "params": {
        "Region": "eu-west-3",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region me-south-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.me-south-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "me-south-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region sa-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.sa-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "sa-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.us-east-1.amazonaws.com"
        }
      },
      "params": {

```

```

        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": false
    }
},
{
    "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager-fips.us-east-1.amazonaws.com"
        }
    },
    "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
        "UseDualStack": false
    }
},
{
    "documentation": "For region us-east-2 with FIPS disabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager.us-east-2.amazonaws.com"
        }
    },
    "params": {
        "Region": "us-east-2",
        "UseFIPS": false,
        "UseDualStack": false
    }
},
{
    "documentation": "For region us-east-2 with FIPS enabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager-fips.us-east-2.amazonaws.com"
        }
    },
    "params": {
        "Region": "us-east-2",
        "UseFIPS": true,
        "UseDualStack": false
    }
},
{
    "documentation": "For region

```

```

us-west-1 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.us-west-1.amazonaws.com"
    }
  },
  "params": {
    "Region": "us-west-1",
    "UseFIPS": false,
    "UseDualStack": false
  }
},
{
  "documentation": "For region us-west-1 with FIPS enabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-fips.us-west-1.amazonaws.com"
    }
  },
  "params": {
    "Region": "us-west-1",
    "UseFIPS": true,
    "UseDualStack": false
  }
},
{
  "documentation": "For region us-west-2 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.us-west-2.amazonaws.com"
    }
  },
  "params": {
    "Region": "us-west-2",
    "UseFIPS": false,
    "UseDualStack": false
  }
},
{
  "documentation": "For region us-west-2 with FIPS enabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-fips.us-west-2.amazonaws.com"
    }
  },
  "params": {

```

```

    "Region": "us-west-2",
    "UseFIPS": true,
    "UseDualStack": false
  }
},
{
  "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-fips.us-east-1.api.aws"
    }
  },
  "params": {
    "Region": "us-east-1",
    "UseFIPS": true,

    "UseDualStack": true
  }
},
{
  "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.us-east-1.api.aws"
    }
  },
  "params": {
    "Region": "us-east-1",
    "UseFIPS": false,
    "UseDualStack": true
  }
},
{
  "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url":
"https://license-manager.cn-north-1.amazonaws.com.cn"
    }
  },
  "params": {
    "Region": "cn-north-1",
    "UseFIPS": false,
    "UseDualStack": false
  }
},
{
  "documentation": "For region cn-northwest-1 with FIPS disabled and DualStack disabled",

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    "expect": {
      "endpoint": {
        "url": "https://license-manager.cn-northwest-1.amazonaws.com.cn"
      }
    },
    "params": {
      "Region": "cn-northwest-1",
      "UseFIPS": false,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-fips.cn-north-1.api.amazonwebservices.com.cn"
      }
    },
    "params": {
      "Region": "cn-north-1",
      "UseFIPS": true,
      "UseDualStack": true
    }
  },
  {
    "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-fips.cn-north-1.amazonaws.com.cn"
      }
    },
    "params": {
      "Region": "cn-north-1",
      "UseFIPS": true,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager.cn-north-1.api.amazonwebservices.com.cn"
      }
    },
    "params": {
      "Region": "cn-north-1",
      "UseFIPS": false,

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        "UseDualStack": true
    }
},
{
    "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager.us-gov-east-1.amazonaws.com"
        }
    },
    "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": false,
        "UseDualStack": false
    }
},
{
    "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager-fips.us-gov-east-1.amazonaws.com"
        }
    },
    "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": true,
        "UseDualStack": false
    }
},
{
    "documentation": "For region us-gov-west-1 with FIPS disabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager.us-gov-west-1.amazonaws.com"
        }
    },
    "params": {
        "Region": "us-gov-west-1",
        "UseFIPS": false,
        "UseDualStack": false
    }
},
{
    "documentation":
    "For region us-gov-west-1 with FIPS enabled and DualStack disabled",
    "expect": {
        "endpoint": {

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        "url": "https://license-manager-fips.us-gov-west-1.amazonaws.com"
    }
},
"params": {
    "Region": "us-gov-west-1",
    "UseFIPS": true,
    "UseDualStack": false
}
},
{
    "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager-fips.us-gov-east-1.api.aws"
        }
    },
    "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": true,
        "UseDualStack": true
    }
},
{
    "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager.us-gov-east-1.api.aws"
        }
    },
    "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": false,
        "UseDualStack": true
    }
},
{
    "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager.us-iso-east-1.c2s.ic.gov"
        }
    },
    "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": false,
        "UseDualStack": false
    }
}

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    }
  },
  {
    "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
    "expect": {
      "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
    },
    "params": {
      "Region": "us-iso-east-1",
      "UseFIPS": true,
      "UseDualStack": true
    }
  },
  {
    "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-fips.us-iso-east-1.c2s.ic.gov"
      }
    },
    "params": {
      "Region": "us-iso-east-1",
      "UseFIPS": true,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
    "expect": {
      "error": "DualStack is enabled
but this partition does not support DualStack"
    },
    "params": {
      "Region": "us-iso-east-1",
      "UseFIPS": false,
      "UseDualStack": true
    }
  },
  {
    "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager.us-isob-east-1.sc2s.sgov.gov"
      }
    },
    "params": {
      "Region": "us-isob-east-1",
      "UseFIPS": false,

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        "UseDualStack": false
    }
},
{
    "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
    "expect": {
        "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
    },
    "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": true,
        "UseDualStack": true
    }
},
{
    "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager-fips.us-isob-east-1.sc2s.sgov.gov"
        }
    },
    "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": true,
        "UseDualStack": false
    }
},
{
    "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
    "expect": {
        "error": "DualStack is enabled but this partition does not support DualStack"
    },
    "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": false,
        "UseDualStack": true
    }
},
{
    "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
    "expect": {
        "endpoint": {
            "url": "https://example.com"
        }
    },

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    "params": {
      "Region": "us-east-1",
      "UseFIPS": false,
      "UseDualStack": false,
      "Endpoint": "https://example.com"
    }
  },
  {
    "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
    "expect": {
      "endpoint": {
        "url": "https://example.com"
      }
    },
    "params": {
      "UseFIPS": false,
      "UseDualStack": false,
      "Endpoint": "https://example.com"
    }
  },
  {
    "documentation": "For custom endpoint with fips enabled and dualstack disabled",
    "expect": {
      "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
    },
    "params": {
      "Region": "us-east-1",
      "UseFIPS": true,
      "UseDualStack": false,
      "Endpoint": "https://example.com"
    }
  },
  {
    "documentation": "For custom endpoint with fips disabled and dualstack enabled",
    "expect": {
      "error":
"Invalid Configuration: Dualstack and custom endpoint are not supported"
    },
    "params": {
      "Region": "us-east-1",
      "UseFIPS": false,
      "UseDualStack": true,
      "Endpoint": "https://example.com"
    }
  },
  {

```

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        "documentation": "Missing region",
        "expect": {
            "error": "Invalid Configuration: Missing Region"
        }
    },
    "version": "1.0"
}
},
"com.amazonaws.licensemanager#AcceptGrant": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#AcceptGrantRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#AcceptGrantResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ]
},
"traits": {
    "smithy.api#documentation": "<p>Accepts the specified grant.</p>"
}
},
"com.amazonaws.licensemanager#AcceptGrantRequest": {

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"type": "structure",
"members": {
  "GrantArn": {
    "target": "com.amazonaws.licensemanager#Arn",
    "traits": {
      "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
      "smithy.api#required": {}
    }
  }
},
"traits": {
  "smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#AcceptGrantResponse": {
  "type": "structure",
  "members": {
    "GrantArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>Grant
ARN.</p>"
      }
    },
    "Status": {
      "target": "com.amazonaws.licensemanager#GrantStatus",
      "traits": {
        "smithy.api#documentation": "<p>Grant status.</p>"
      }
    },
    "Version": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Grant version.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#AccessDeniedException": {
  "type": "structure",
  "members": {
    "Message": {
      "target": "com.amazonaws.licensemanager#Message"
    }
  },
}

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"traits": {
  "aws.protocols#awsQueryError": {

"code": "ServiceAccessDenied",
  "httpResponseCode": 401
  },
  "smithy.api#documentation": "<p>Access to resource denied.</p>",
  "smithy.api#error": "client",
  "smithy.api#httpError": 401
  }
},
"com.amazonaws.licensemanager#ActivationOverrideBehavior": {
  "type": "enum",
  "members": {
    "DISTRIBUTED_GRANTS_ONLY": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "DISTRIBUTED_GRANTS_ONLY"
      }
    },
    "ALL_GRANTS_PERMITTED_BY_ISSUER": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "ALL_GRANTS_PERMITTED_BY_ISSUER"
      }
    }
  }
},
"com.amazonaws.licensemanager#AllowedOperation": {

"type": "enum",
  "members": {
    "CREATE_GRANT": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "CreateGrant"
      }
    },
    "CHECKOUT_LICENSE": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "CheckoutLicense"
      }
    },
    "CHECKOUT_BORROW_LICENSE": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "CheckoutBorrowLicense"
      }
    }
  }
}

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    }
  },
  "CHECK_IN_LICENSE": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "CheckInLicense"
    }
  },
  "EXTEND_CONSUMPTION_LICENSE": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "ExtendConsumptionLicense"
    }
  },
  "LIST_PURCHASED_LICENSES": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "ListPurchasedLicenses"
    }
  },
  "CREATE_TOKEN": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "CreateToken"
    }
  }
},
"com.amazonaws.licensemanager#AllowedOperationList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#AllowedOperation"
  },
  "traits": {
    "smithy.api#length": {
      "min": 1,
      "max":
7
    }
  }
},
"com.amazonaws.licensemanager#Arn": {
  "type": "string",
  "traits": {
    "smithy.api#length": {
      "min": 0,
      "max": 2048
    }
  }
}

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    },
    "smithy.api#pattern": "^arn:aws(-(cn|us-gov|iso-b|iso-c|iso-d))?:[A-Za-z0-9][A-Za-z0-9_/.-]{0,62}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9][A-Za-z0-9:/_+=,@.-]{0,1023}$"
  }
},
"com.amazonaws.licensemanager#ArnList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#Arn"
  }
},
"com.amazonaws.licensemanager#AuthorizationException": {
  "type": "structure",
  "members": {
    "Message": {
      "target": "com.amazonaws.licensemanager#Message"
    }
  },
  "traits": {
    "aws.protocols#awsQueryError":
  {
    "code": "AuthorizationFailure",
    "httpResponseCode": 403
  },
    "smithy.api#documentation": "<p>The Amazon Web Services user account does not have permission to perform the action. Check the IAM\n      policy associated with this account.</p>",
    "smithy.api#error": "client",
    "smithy.api#httpError": 403
  }
},
"com.amazonaws.licensemanager#AutomatedDiscoveryInformation": {
  "type": "structure",
  "members": {
    "LastRunTime": {
      "target": "com.amazonaws.licensemanager#DateTime",
      "traits": {
        "smithy.api#documentation": "<p>Time that automated discovery last ran.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Describes automated discovery.</p>"
  }
},
"com.amazonaws.licensemanager#Boolean": {
  "type": "boolean",
  "traits": {

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    "smithy.api#default": false
  }
},
"com.amazonaws.licensemanager#BorrowConfiguration": {
  "type": "structure",
  "members": {
    "AllowEarlyCheckIn": {
      "target": "com.amazonaws.licensemanager#BoxBoolean",
      "traits": {
        "smithy.api#documentation": "<p>Indicates whether early check-ins are allowed.</p>",
        "smithy.api#required": {}
      }
    },
    "MaxTimeToLiveInMinutes": {
      "target": "com.amazonaws.licensemanager#BoxInteger",
      "traits": {
        "smithy.api#documentation": "<p>Maximum time for the borrow configuration, in minutes.</p>",
        "smithy.api#required": {}
      }
    }
  }
},
"traits": {
  "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
}
},
"com.amazonaws.licensemanager#BoxBoolean": {
  "type": "boolean"
},
"com.amazonaws.licensemanager#BoxInteger": {
  "type": "integer"
},
"com.amazonaws.licensemanager#BoxLong": {
  "type": "long"
},
"com.amazonaws.licensemanager#CheckInLicense": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#CheckInLicenseRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#CheckInLicenseResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {

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    "target": "com.amazonaws.licensemanager#AuthorizationException"
  },
  {
    "target": "com.amazonaws.licensemanager#ConflictException"
  },
  {
    "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
  },
  {
    "target": "com.amazonaws.licensemanager#RateLimitExceededException"
  },
  {
    "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
  },
  {
    "target": "com.amazonaws.licensemanager#ServerInternalException"
  },
  {
    "target": "com.amazonaws.licensemanager#ValidationException"
  }
],
"traits": {
  "smithy.api#documentation": "<p>Checks in the specified license. Check in a license when it is no longer
in use.</p>"
}
},
"com.amazonaws.licensemanager#CheckInLicenseRequest":
{
  "type": "structure",
  "members": {
    "LicenseConsumptionToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>License consumption token.</p>",
        "smithy.api#required": {}
      }
    },
    "Beneficiary": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>License beneficiary.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
}

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    },
    "com.amazonaws.licensemanager#CheckInLicenseResponse": {
      "type": "structure",
      "members": {},
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicense":
  {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#EntitlementNotAllowedException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
      },
      {
        "target":
"com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#RedirectException"
      },
      {
        "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
      },
      {
        "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"

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    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Checks out the specified license for offline use.</p>"
  }
},
"com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest": {
  "type": "structure",
  "members":
{
  "LicenseArn": {
    "target": "com.amazonaws.licensemanager#Arn",
    "traits": {
      "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license. The license must use the borrow consumption configuration.</p>",
      "smithy.api#required": {}
    }
  },
  "Entitlements": {
    "target": "com.amazonaws.licensemanager#EntitlementDataList",
    "traits": {
      "smithy.api#documentation": "<p>License entitlements. Partial checkouts are not supported.</p>",
      "smithy.api#required": {}
    }
  },
  "DigitalSignatureMethod": {
    "target": "com.amazonaws.licensemanager#DigitalSignatureMethod",
    "traits": {
      "smithy.api#documentation": "<p>Digital signature method. The possible value is JSON Web Signature (JWS) algorithm PS384.\n      For more information, see <a href='\"https://tools.ietf.org/html/rfc7518#section-3.5\"'>RFC 7518 Digital Signature with RSASSA-PSS</a>.</p>",
      "smithy.api#required": {}
    }
  },
  "NodeId": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Node ID.</p>"
    }
  },
  "CheckoutMetadata": {
    "target": "com.amazonaws.licensemanager#MetadataList",
    "traits": {
      "smithy.api#documentation": "<p>Information about constraints.</p>"
    }
  }
}

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    },
    "ClientToken": {
      "target": "com.amazonaws.licensemanager#ClientToken",
      "traits": {
        "smithy.api#documentation":
"<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
        "smithy.api#required": {}
      }
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse": {
  "type": "structure",
  "members": {
    "LicenseArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
      }
    },
    "LicenseConsumptionToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>License consumption token.</p>"
      }
    },
    "EntitlementsAllowed":
{
      "target": "com.amazonaws.licensemanager#EntitlementDataList",
      "traits": {
        "smithy.api#documentation": "<p>Allowed license entitlements.</p>"
      }
    },
    "NodeId": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Node ID.</p>"
      }
    },
    "SignedToken": {
      "target": "com.amazonaws.licensemanager#SignedToken",
      "traits": {
        "smithy.api#documentation": "<p>Signed token.</p>"
      }
    }
  }
},

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    "IssuedAt": {
      "target": "com.amazonaws.licensemanager#ISO8601DateTime",
      "traits": {
        "smithy.api#documentation": "<p>Date and time at which the license checkout
is issued.</p>"
      }
    },
    "Expiration": {
      "target": "com.amazonaws.licensemanager#ISO8601DateTime",
      "traits": {
        "smithy.api#documentation": "<p>Date and time at which the license checkout expires.</p>"
      }
    },
    "CheckoutMetadata": {
      "target": "com.amazonaws.licensemanager#MetadataList",
      "traits": {
        "smithy.api#documentation": "<p>Information about constraints.</p>"
      }
    },
    "traits": {
      "smithy.api#output": {}
    },
    "com.amazonaws.licensemanager#CheckoutLicense": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#CheckoutLicenseRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#CheckoutLicenseResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        }
      ]
    }
  }

```



```

    {
      "target": "com.amazonaws.licensemanager#RedirectException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
    },
    {
      "target":
"com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Checks out the specified license.</p>\n    <note>\n    <p>If the
account that created the license is the same that is performing the check out, you must\n    specify the account
as the beneficiary.</p>\n    </note>"
  }
},
"com.amazonaws.licensemanager#CheckoutLicenseRequest": {
  "type": "structure",
  "members": {
    "ProductSKU": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Product
SKU.</p>",
        "smithy.api#required": {}
      }
    },
    "CheckoutType": {
      "target": "com.amazonaws.licensemanager#CheckoutType",
      "traits": {
        "smithy.api#documentation": "<p>Checkout type.</p>",
        "smithy.api#required": {}
      }
    },
    "KeyFingerprint": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Key fingerprint identifying the license.</p>",
        "smithy.api#required": {}
      }
    }
  },

```

```

    "Entitlements": {
      "target": "com.amazonaws.licensemanager#EntitlementDataList",
      "traits": {
        "smithy.api#documentation": "<p>License entitlements.</p>",
      }
    },
    "smithy.api#required": {}
  },
  "ClientToken": {
    "target": "com.amazonaws.licensemanager#ClientToken",
    "traits": {
      "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
      "smithy.api#required": {}
    }
  },
  "Beneficiary": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>License beneficiary.</p>"
    }
  },
  "NodeId": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Node ID.</p>"
    }
  },
  "traits": {
    "smithy.api#input": {}
  },
  "com.amazonaws.licensemanager#CheckoutLicenseResponse": {
    "type": "structure",
    "members": {
      "CheckoutType": {
        "target": "com.amazonaws.licensemanager#CheckoutType",
        "traits": {
          "smithy.api#documentation": "<p>Checkout type.</p>"
        }
      },
      "LicenseConsumptionToken": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>License consumption token.</p>"
        }
      }
    }
  }
}

```

```

    },
    "EntitlementsAllowed": {
      "target": "com.amazonaws.licensemanager#EntitlementDataList",
      "traits": {
        "smithy.api#documentation": "<p>Allowed license entitlements.</p>"
      }
    },
    },
    "SignedToken": {
      "target": "com.amazonaws.licensemanager#SignedToken",
      "traits": {
        "smithy.api#documentation": "<p>Signed token.</p>"
      }
    },
    },
    "NodeId": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Node ID.</p>"
      }
    },
    },
    "IssuedAt": {
      "target": "com.amazonaws.licensemanager#ISO8601DateTime",
      "traits": {
        "smithy.api#documentation": "<p>Date and time at which the license checkout is issued.</p>"
      }
    },
    },
    "Expiration": {
      "target": "com.amazonaws.licensemanager#ISO8601DateTime",
      "traits": {
        "smithy.api#documentation": "<p>Date and
time at which the license checkout expires.</p>"
      }
    },
    },
    "LicenseArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the checkout license.</p>"
      }
    },
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#CheckoutType": {
    "type": "enum",
    "members": {
      "PROVISIONAL": {
        "target": "smithy.api#Unit",

```

```

    "traits": {
      "smithy.api#enumValue": "PROVISIONAL"
    }
  },
  "PERPETUAL": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "PERPETUAL"
    }
  }
},
"com.amazonaws.licensemanager#ClientRequestToken": {
  "type": "string",
  "traits": {
    "smithy.api#length": {
      "min": 1,
      "max": 36
    }
  }
},
"com.amazonaws.licensemanager#ClientToken": {
  "type": "string",
  "traits": {
    "smithy.api#length": {
      "min": 0,
      "max": 2048
    },
    "smithy.api#pattern": "^\\S+$"
  }
},
"com.amazonaws.licensemanager#ConflictException": {
  "type": "structure",
  "members": {
    "Message": {
      "target": "com.amazonaws.licensemanager#Message"
    }
  },
  "traits": {
    "aws.protocols#awsQueryError": {
      "code": "ConflictException",
      "httpResponseCode":
409
    },
    "smithy.api#documentation": "<p>There was a conflict processing the request. Try your request
again.</p>",
    "smithy.api#error": "client",
    "smithy.api#httpError": 409

```

```

    }
  },
  "com.amazonaws.licensemanager#ConsumedLicenseSummary": {
    "type": "structure",
    "members": {
      "ResourceType": {
        "target": "com.amazonaws.licensemanager#ResourceType",
        "traits": {
          "smithy.api#documentation": "<p>Resource type of the resource consuming a license.</p>"
        }
      },
      "ConsumedLicenses": {
        "target": "com.amazonaws.licensemanager#BoxLong",
        "traits": {
          "smithy.api#documentation": "<p>Number of licenses consumed by the resource.</p>"
        }
      }
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Details about license consumption.</p>"
  },
  "com.amazonaws.licensemanager#ConsumedLicenseSummaryList": {
    "type": "list",
    "member": {
      "target": "com.amazonaws.licensemanager#ConsumedLicenseSummary"
    }
  },
  "com.amazonaws.licensemanager#ConsumptionConfiguration": {
    "type": "structure",
    "members": {
      "RenewType": {
        "target": "com.amazonaws.licensemanager#RenewType",
        "traits": {
          "smithy.api#documentation": "<p>Renewal frequency.</p>"
        }
      },
      "ProvisionalConfiguration": {
        "target": "com.amazonaws.licensemanager#ProvisionalConfiguration",
        "traits": {
          "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
        }
      },
      "BorrowConfiguration": {
        "target": "com.amazonaws.licensemanager#BorrowConfiguration",
        "traits": {
          "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
        }
      }
    }
  }
}

```

```

    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Details about a consumption configuration.</p>"
  }
},
"com.amazonaws.licensemanager#CreateGrant": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#CreateGrantRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#CreateGrantResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target":
"com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Creates a grant for the specified license. A grant shares the use of
license\n entitlements with a specific Amazon Web Services account, an organization, or an\n
organizational unit (OU). For more
information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-
licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
  }
},
"com.amazonaws.licensemanager#CreateGrantRequest": {

```

```

"type": "structure",
"members": {
  "ClientToken": {
    "target": "com.amazonaws.licensemanager#ClientToken",
    "traits": {
      "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",
      "smithy.api#required": {}
    }
  },
  "GrantName": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Grant name.</p>",
      "smithy.api#required": {}
    }
  }
},
"LicenseArn": {
  "target": "com.amazonaws.licensemanager#Arn",
  "traits": {
    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
    "smithy.api#required": {}
  }
},
"Principals": {
  "target": "com.amazonaws.licensemanager#PrincipalArnList",
  "traits": {
    "smithy.api#documentation": "<p>The grant principals. You can specify one of the following as an
Amazon Resource Name (ARN):</p>
<ul>
<li><p>An Amazon Web Services
account, which includes only the account specified.</p>
</li>
<li><p>An organizational unit (OU), which includes all accounts in the OU.</p>
</li>
<li><p>An organization, which will include all accounts across your organization.</p>
</li>
</ul>
"smithy.api#required": {}
  }
},
"HomeRegion": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Home Region of the grant.</p>",
    "smithy.api#required": {}
  }
},
"AllowedOperations": {
  "target": "com.amazonaws.licensemanager#AllowedOperationList",
  "traits": {

```

```

        "smithy.api#documentation": "<p>Allowed operations for the grant.</p>",
        "smithy.api#required": {}
    }
}
},
"traits": {
    "smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateGrantResponse": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
                "smithy.api#documentation": "<p>Grant status.</p>"
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Grant version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CreateGrantVersion":
{
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateGrantVersionRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateGrantVersionResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        }
    ]
}

```



```

    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Creates a new version of the specified grant. For more information, see\n    <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
  }
},
"com.amazonaws.licensemanager#CreateGrantVersionRequest": {
  "type": "structure",
  "members": {
    "ClientToken": {
      "target": "com.amazonaws.licensemanager#ClientToken",
      "traits": {
        "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
        "smithy.api#required": {}
      }
    },
    "GrantArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
        "smithy.api#required": {}
      }
    },
    "GrantName": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {

```

```

    "smithy.api#documentation": "<p>Grant name.</p>"
  }
},
"AllowedOperations": {
  "target": "com.amazonaws.licensemanager#AllowedOperationList",
  "traits": {
    "smithy.api#documentation": "<p>Allowed operations for the grant.</p>"
  }
},
"Status": {
  "target": "com.amazonaws.licensemanager#GrantStatus",
  "traits": {
    "smithy.api#documentation": "<p>Grant status.</p>"
  }
},
"StatusReason": {
  "target": "com.amazonaws.licensemanager#StatusReasonMessage",
  "traits": {
    "smithy.api#documentation": "<p>Grant status reason.</p>"
  }
},
"SourceVersion": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Current version of the grant.</p>"
  }
},
"Options": {
  "target": "com.amazonaws.licensemanager#Options",
  "traits": {
    "smithy.api#documentation": "<p>The options specified for the grant.</p>"
  }
}
},
"traits": {
  "smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateGrantVersionResponse": {
  "type": "structure",
  "members": {
    "GrantArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>Grant ARN.</p>"
      }
    }
  }
},
"Status": {

```

```

        "target": "com.amazonaws.licensemanager#GrantStatus",
        "traits": {
            "smithy.api#documentation": "<p>Grant status.</p>"
        }
    },
    "Version": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
            "smithy.api#documentation": "<p>New version of the grant.</p>"
        }
    }
},
"traits":
{
    "smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CreateLicense": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#RedirectException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ]
},

```

```

    "traits": {
      "smithy.api#documentation": "<p>Creates a license.</p>"
    }
  },
  "com.amazonaws.licensemanager#CreateLicenseConfiguration": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
      }
    ]
  },
  "traits": {
    "smithy.api#documentation": "<p>Creates a license configuration.</p>\n    <p>A license configuration is an abstraction of a customer license agreement that can be\n    consumed and enforced by License Manager. Components include specifications for the license\n    type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n    Dedicated Instance, Dedicated Host, or all of these), license affinity to host (how long a \n    license must be associated with a host), and the number of licenses purchased and used.</p>"
  }
},
"com.amazonaws.licensemanager#CreateLicenseConfigurationRequest": {
  "type": "structure",
  "members": {
    "Name": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Name of the license configuration.</p>",

```

```

    "smithy.api#required": {}
  },
  "Description": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Description of the license configuration.</p>"
    }
  },
  "LicenseCountingType": {
    "target": "com.amazonaws.licensemanager#LicenseCountingType",
    "traits": {
      "smithy.api#documentation": "<p>Dimension used to track the license inventory.</p>",
      "smithy.api#required": {}
    }
  },
  "LicenseCount": {
    "target": "com.amazonaws.licensemanager#BoxLong",
    "traits": {
      "smithy.api#documentation": "<p>Number of licenses managed by the license configuration.</p>"
    }
  },
  "LicenseCountHardLimit": {
    "target": "com.amazonaws.licensemanager#BoxBoolean",
    "traits": {
      "smithy.api#documentation": "<p>Indicates whether hard or soft license enforcement is used. Exceeding a hard limit\n      blocks the launch of new instances.</p>"
    }
  },
  "LicenseRules": {
    "target":
"com.amazonaws.licensemanager#StringList",
    "traits": {
      "smithy.api#documentation": "<p>License rules. The syntax is #name=value (for example,
#allowedTenancy=EC2-DedicatedHost). The available rules \n      vary by dimension, as follows.</p>\n
<ul>\n      <li>\n          <p>\n              <code>Cores</code> dimension: <code>allowedTenancy</code> |\n              <code>licenseAffinityToHost</code> |\n              <code>maximumCores</code> |
<code>minimumCores</code>\n          </p>\n          </li>\n          <li>\n          <p>\n              <code>Instances</code> dimension: <code>allowedTenancy</code> |\n              <code>maximumCores</code> |
<code>minimumCores</code> |\n              <code>maximumSockets</code> | <code>minimumSockets</code> |\n              <code>maximumVcpus</code> | <code>minimumVcpus</code>\n          </p>\n          </li>\n          <li>\n          <p>\n              <code>Sockets</code> dimension: <code>allowedTenancy</code> |\n              <code>licenseAffinityToHost</code> |\n              <code>maximumSockets</code> |
<code>minimumSockets</code>\n          </p>\n          </li>\n          <li>\n          <p>\n              <code>vCPUs</code> dimension: <code>allowedTenancy</code> |
<code>honorVcpuOptimization</code> |\n              <code>maximumVcpus</code> |
<code>minimumVcpus</code>\n          </p>\n          </li>\n        </ul>\n      <p>The unit for

```

`licenseAffinityToHost` is days and the range is 1 to 180. The possible values for `allowedTenancy` are `EC2-Default`, `EC2-DedicatedHost`, and `EC2-DedicatedInstance`. The possible values for `honorVcpuOptimization` are `True` and `False`.

```
    }
  },

  "Tags": {
    "target": "com.amazonaws.licensemanager#TagList",
    "traits": {
      "smithy.api#documentation": "<p>Tags to add to the license configuration.</p>"
    }
  },
  "DisassociateWhenNotFound": {
    "target": "com.amazonaws.licensemanager#BoxBoolean",
    "traits": {
      "smithy.api#documentation": "<p>When true, disassociates a resource when software is
uninstalled.</p>"
    }
  },
  "ProductInformationList": {
    "target": "com.amazonaws.licensemanager#ProductInformationList",
    "traits": {
      "smithy.api#documentation": "<p>Product information.</p>"
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#CreateLicenseConfigurationResponse":
{
  "type": "structure",
  "members": {
    "LicenseConfigurationArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource": {
  "type": "operation",
```

```



```

the *License Manager User Guide*.

```
    "smithy.api#required": {}
  }
},
"DestinationLicenseContext":
{
  "target": "com.amazonaws.licensemanager#LicenseConversionContext",
  "traits": {
    "smithy.api#documentation": "<p>Information that identifies the license type you are converting to.
```

For the structure of the destination license, see <https://docs.aws.amazon.com/license-manager/latest/userguide/conversion-procedures.html#conversion-cli> Convert a license type using the CLI in the *License Manager User Guide*.

```
    "smithy.api#required": {}
  }
}
},
"traits": {
  "smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse": {
  "type": "structure",
  "members": {
    "LicenseConversionTaskId": {
      "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",

      "traits": {
        "smithy.api#documentation": "<p>The ID of the created license type conversion task.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
```



```

    "target": "com.amazonaws.licensemanager#AuthorizationException"
  },
  {
    "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
  },
  {
    "target": "com.amazonaws.licensemanager#RateLimitExceededException"
  },
  {
    "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
  },
  {
    "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
  },
  {
    "target": "com.amazonaws.licensemanager#ServerInternalException"
  },
  {
    "target": "com.amazonaws.licensemanager#ValidationException"
  }
],
"traits": {
  "smithy.api#documentation": "<p>Creates a report generator.</p>"
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest": {
  "type": "structure",
  "members": {
    "ReportGeneratorName":
  {
    "target": "com.amazonaws.licensemanager#ReportGeneratorName",
    "traits": {
      "smithy.api#documentation": "<p>Name of the report generator.</p>",
      "smithy.api#required": {}
    }
  },
  "Type": {
    "target": "com.amazonaws.licensemanager#ReportTypeList",
    "traits": {
      "smithy.api#documentation": "<p>Type of reports to generate. The following report types an be generated:</p>\n
      <ul>\n
        <li>\n
          <p>License configuration report - Reports the number and details of consumed licenses for a license configuration.</p>\n
        </li>\n
        <li>\n
          <p>Resource report - Reports the tracked licenses and resource consumption for a license configuration.</p>\n
        </li>\n
      </ul>",
      "smithy.api#required": {}
    }
  }
}
},

```

```

"ReportContext": {
  "target": "com.amazonaws.licensemanager#ReportContext",
  "traits": {
    "smithy.api#documentation": "<p>Defines the type of license configuration the report generator
tracks.</p>",
    "smithy.api#required": {}
  }
},
"ReportFrequency": {
  "target": "com.amazonaws.licensemanager#ReportFrequency",
  "traits": {
    "smithy.api#documentation": "<p>Frequency by which reports are generated. Reports can be
generated daily, monthly, or weekly.</p>",
    "smithy.api#required": {}
  }
},
"ClientToken": {
  "target": "com.amazonaws.licensemanager#ClientRequestToken",
  "traits": {
    "smithy.api#documentation": "<p>Unique,
case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
    "smithy.api#required": {}
  }
},
>Description": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Description of the report generator.</p>"
  }
},
Tags": {
  "target": "com.amazonaws.licensemanager#TagList",
  "traits": {
    "smithy.api#documentation": "<p>Tags to add to the report generator.</p>"
  }
}
},
"traits": {
  "smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse": {
  "type": "structure",
  "members": {
    "LicenseManagerReportGeneratorArn":
{
  "target": "com.amazonaws.licensemanager#String",
  "traits": {

```

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    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the new report
generator.</p>"
  }
}
},
"traits": {
  "smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseRequest": {
  "type": "structure",
  "members": {
    "LicenseName": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>License name.</p>",
        "smithy.api#required": {}
      }
    },
    "ProductName": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Product
name.</p>",
        "smithy.api#required": {}
      }
    },
    "ProductSKU": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Product SKU.</p>",
        "smithy.api#required": {}
      }
    },
    "Issuer": {
      "target": "com.amazonaws.licensemanager#Issuer",
      "traits": {
        "smithy.api#documentation": "<p>License issuer.</p>",
        "smithy.api#required": {}
      }
    },
    "HomeRegion": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Home Region for the license.</p>",
        "smithy.api#required": {}
      }
    }
  }
}

```

```

    }
    },
    "Validity": {
      "target": "com.amazonaws.licensemanager#DatetimeRange",
      "traits": {
        "smithy.api#documentation": "<p>Date and time range during which the license is valid, in ISO8601-
UTC format.</p>",
        "smithy.api#required": {}
      }
    },
    "Entitlements": {
      "target": "com.amazonaws.licensemanager#EntitlementList",
      "traits": {
        "smithy.api#documentation": "<p>License entitlements.</p>",
        "smithy.api#required": {}
      }
    },
    "Beneficiary": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>License beneficiary.</p>",
        "smithy.api#required": {}
      }
    },
    "ConsumptionConfiguration": {
      "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
      "traits": {
        "smithy.api#documentation": "<p>Configuration for consumption of the license. Choose a provisional
configuration for workloads\n      running with continuous connectivity. Choose a borrow configuration for
workloads with offline\n      usage.</p>",
        "smithy.api#required": {}
      }
    },
    "LicenseMetadata": {
      "target": "com.amazonaws.licensemanager#MetadataList",
      "traits": {
        "smithy.api#documentation": "<p>Information about the license.</p>"
      }
    },
    "ClientToken": {
      "target": "com.amazonaws.licensemanager#ClientToken",
      "traits": {
        "smithy.api#documentation":
"<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
        "smithy.api#required": {}
      }
    }
  },
}

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    "traits": {
      "smithy.api#input": {}
    }
  },
  "com.amazonaws.licensemanager#CreateLicenseResponse": {
    "type": "structure",
    "members": {
      "LicenseArn": {
        "target": "com.amazonaws.licensemanager#Arn",
        "traits": {
          "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
        }
      },
      "Status": {
        "target": "com.amazonaws.licensemanager#LicenseStatus",
        "traits": {
          "smithy.api#documentation": "<p>License status.</p>"
        }
      },
      "Version": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>License version.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#CreateLicenseVersion": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#CreateLicenseVersionRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#CreateLicenseVersionResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#ConflictException"
      }
    ]
  }
}

```

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    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#RedirectException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Creates a new version of the specified license.</p>"
  }
},
"com.amazonaws.licensemanager#CreateLicenseVersionRequest": {
  "type": "structure",
  "members": {
    "LicenseArn": {
      "target":
"com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
        "smithy.api#required": {}
      }
    },
    "LicenseName": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>License name.</p>",
        "smithy.api#required": {}
      }
    },
    "ProductName": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Product name.</p>",
        "smithy.api#required": {}
      }
    },
    "Issuer": {
      "target": "com.amazonaws.licensemanager#Issuer",

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```

    "traits":
{
    "smithy.api#documentation": "<p>License issuer.</p>",
    "smithy.api#required": {}
}
},
"HomeRegion": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
        "smithy.api#documentation": "<p>Home Region of the license.</p>",
        "smithy.api#required": {}
    }
},
"Validity": {
    "target": "com.amazonaws.licensemanager#DatetimeRange",
    "traits": {
        "smithy.api#documentation": "<p>Date and time range during which the license is valid, in ISO8601-
UTC format.</p>",
        "smithy.api#required": {}
    }
},
"LicenseMetadata": {
    "target": "com.amazonaws.licensemanager#MetadataList",
    "traits": {
        "smithy.api#documentation": "<p>Information about the license.</p>"
    }
},
"Entitlements": {
    "target": "com.amazonaws.licensemanager#EntitlementList",
    "traits": {
        "smithy.api#documentation": "<p>License entitlements.</p>",
        "smithy.api#required": {}
    }
},
"ConsumptionConfiguration": {
    "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
    "traits": {
        "smithy.api#documentation": "<p>Configuration for consumption of the license. Choose a provisional
configuration for workloads\n    running with continuous connectivity. Choose a borrow configuration for
workloads with offline\n    usage.</p>",
        "smithy.api#required": {}
    }
},
"Status": {
    "target": "com.amazonaws.licensemanager#LicenseStatus",
    "traits": {
        "smithy.api#documentation": "<p>License status.</p>",

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        "smithy.api#required": {}
    }
},
"ClientToken": {
    "target": "com.amazonaws.licensemanager#ClientToken",
    "traits": {
        "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",
        "smithy.api#required": {}
    }
},
"SourceVersion": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
        "smithy.api#documentation": "<p>Current version of the license.</p>"
    }
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseVersionResponse": {
    "type": "structure",
    "members": {
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>License ARN.</p>"
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>New version of the license.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#LicenseStatus",
            "traits": {
                "smithy.api#documentation": "<p>License status.</p>"
            }
        }
    }
},
"traits": {
    "smithy.api#output":

```



```

{}
  }
},
"com.amazonaws.licensemanager#CreateToken": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#CreateTokenRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#CreateTokenResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#RedirectException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Creates a long-lived token.</p>\n    <p>A refresh token is a JWT token used to get an access token. With an access token,\n    you can call AssumeRoleWithWebIdentity to get role credentials that you can use to \n    call License Manager to manage the specified license.</p>"
  }
},
"com.amazonaws.licensemanager#CreateTokenRequest": {
  "type": "structure",
  "members": {
    "LicenseArn": {

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```

        "target": "com.amazonaws.licensemanager#Arn",
        "traits":
    {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license. The ARN is
mapped to the aud claim of the\n      JWT token.</p>",
        "smithy.api#required": {}
    }
},
"RoleArns": {
    "target": "com.amazonaws.licensemanager#ArnList",
    "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the IAM roles to embed in the
token. \n      License Manager does not check whether the roles are in use.</p>"
    }
},
"ExpirationInDays": {
    "target": "com.amazonaws.licensemanager#Integer",
    "traits": {
        "smithy.api#documentation": "<p>Token expiration, in days, counted from token creation. The
default is 365 days.</p>"
    }
},
"TokenProperties": {
    "target": "com.amazonaws.licensemanager#MaxSize3StringList",
    "traits": {
        "smithy.api#documentation": "<p>Data specified by the caller to be included in the JWT token. The
data is mapped\n      to the amr claim of the JWT token.</p>"
    }
},
"ClientToken": {
    "target": "com.amazonaws.licensemanager#ClientToken",
    "traits": {
        "smithy.api#documentation": "<p>Idempotency token, valid for 10 minutes.</p>",
        "smithy.api#required": {}
    }
}
},
"traits": {
    "smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateTokenResponse": {
    "type": "structure",
    "members": {
        "TokenId": {
            "target": "com.amazonaws.licensemanager#String",

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"traits": {
  "smithy.api#documentation": "<p>Token ID.</p>"
}
},
"TokenType": {
  "target": "com.amazonaws.licensemanager#TokenType",
  "traits": {
    "smithy.api#documentation": "<p>Token type.</p>"
  }
},
"Token": {
  "target": "com.amazonaws.licensemanager#TokenString",
  "traits": {
    "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>"
  }
}
},
"traits": {
  "smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#DateTime": {
  "type": "timestamp"
},
"com.amazonaws.licensemanager#DatetimeRange": {
  "type": "structure",
  "members": {
    "Begin": {
      "target": "com.amazonaws.licensemanager#ISO8601DateTime",
      "traits": {
        "smithy.api#documentation": "<p>Start of the time range.</p>",
        "smithy.api#required": {}
      }
    },
    "End": {
      "target": "com.amazonaws.licensemanager#ISO8601DateTime",
      "traits": {
        "smithy.api#documentation": "<p>End of the time range.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Describes a time range, in ISO8601-UTC format.</p>"
  }
},
"com.amazonaws.licensemanager#DeleteGrant": {
  "type": "operation",
  "input": {

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    "target": "com.amazonaws.licensemanager#DeleteGrantRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#DeleteGrantResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Deletes
the specified grant.</p>"
  }
},
"com.amazonaws.licensemanager#DeleteGrantRequest": {
  "type": "structure",
  "members": {
    "GrantArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
        "smithy.api#required": {}
      }
    },
    "StatusReason": {
      "target": "com.amazonaws.licensemanager#StatusReasonMessage",
      "traits": {
        "smithy.api#documentation": "<p>The Status reason for the delete request.</p>"
      }
    }
  }
}

```

```

    },
    "Version": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Current version of the
grant.</p>",
        "smithy.api#required": {}
      }
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#DeleteGrantResponse": {
  "type": "structure",
  "members": {
    "GrantArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>Grant ARN.</p>"
      }
    },
    "Status": {
      "target": "com.amazonaws.licensemanager#GrantStatus",
      "traits": {
        "smithy.api#documentation": "<p>Grant status.</p>"
      }
    },
    "Version": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation":
"<p>Grant version.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#DeleteLicense": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#DeleteLicenseRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#DeleteLicenseResponse"
  }
}

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    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#ConflictException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      }
    ],
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#RedirectException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Deletes the specified license.</p>"
  }
},
"com.amazonaws.licensemanager#DeleteLicenseConfiguration": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    }
  ],

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    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Deletes the specified license configuration.</p>\n    <p>You cannot delete a license configuration that is in use.</p>"
  }
},
"com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest": {
  "type": "structure",
  "members":
{
  "LicenseConfigurationArn": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>ID of the license configuration.</p>",
      "smithy.api#required": {}
    }
  }
},
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse": {
  "type": "structure",
  "members": {},
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse"
  },
  "errors": [
    {

```

```

    "target": "com.amazonaws.licensemanager#AccessDeniedException"
  },
  {
    "target": "com.amazonaws.licensemanager#AuthorizationException"
  },
  {
    "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
  },
  {
    "target": "com.amazonaws.licensemanager#RateLimitExceededException"
  },
  {
    "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
  },
  {
    "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
  },
  {
    "target": "com.amazonaws.licensemanager#ServerInternalException"
  },
  {
    "target": "com.amazonaws.licensemanager#ValidationException"
  }
],
"traits": {
  "smithy.api#documentation": "<p>Deletes the specified report generator.</p>\n    <p>This action deletes the report generator, which stops it from generating future reports.\n    The action cannot be reversed. It has no effect on the previous reports from this generator.</p>"
}
},
"com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest": {
  "type": "structure",
  "members": {
    "LicenseManagerReportGeneratorArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator to be deleted.</p>",
        "smithy.api#required": {}
      }
    }
  }
},
"traits": {
  "smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse": {

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```

    "type": "structure",
    "members": {},
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#DeleteLicenseRequest": {
    "type": "structure",
    "members": {
      "LicenseArn": {
        "target": "com.amazonaws.licensemanager#Arn",
        "traits": {
          "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
          "smithy.api#required": {}
        }
      },
      "SourceVersion": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Current version of the license.</p>",
          "smithy.api#required": {}
        }
      }
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#DeleteLicenseResponse": {
  "type": "structure",
  "members": {
    "Status": {
      "target": "com.amazonaws.licensemanager#LicenseDeletionStatus",
      "traits": {
        "smithy.api#documentation": "<p>License status.</p>"
      }
    },
    "DeletionDate": {
      "target": "com.amazonaws.licensemanager#ISO8601DateTime",
      "traits": {
        "smithy.api#documentation": "<p>Date when the license is deleted.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
}

```

```

    },
    "com.amazonaws.licensemanager#DeleteToken": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#DeleteTokenRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#DeleteTokenResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#RedirectException"
        },
        {
          "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
          "target": "com.amazonaws.licensemanager#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Deletes the specified token. Must be called in the license home
Region.</p>"
      }
    },
    "com.amazonaws.licensemanager#DeleteTokenRequest": {
      "type": "structure",
      "members": {
        "TokenId": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token ID.</p>",
            "smithy.api#required": {}
          }
        }
      }
    }
  }

```

```

    },
    "traits": {
      "smithy.api#input": {}
    }
  },
  "com.amazonaws.licensemanager#DeleteTokenResponse": {
    "type": "structure",
    "members": {},
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#DigitalSignatureMethod": {
    "type": "enum",
    "members": {
      "JWT_PS384": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "JWT_PS384"
        }
      }
    }
  },
  "com.amazonaws.licensemanager#Entitlement": {
    "type": "structure",
    "members": {
      "Name": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Entitlement name.</p>",
          "smithy.api#required": {}
        }
      },
      "Value": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Entitlement resource. Use only  
if the unit is None.</p>"
        }
      },
      "MaxCount": {
        "target": "com.amazonaws.licensemanager#Long",
        "traits": {
          "smithy.api#documentation": "<p>Maximum entitlement count. Use if the unit is not None.</p>"
        }
      },
      "Overage": {

```

```

    "target": "com.amazonaws.licensemanager#BoxBoolean",
    "traits": {
      "smithy.api#documentation": "<p>Indicates whether overages are allowed.</p>"
    }
  },
  "Unit": {
    "target": "com.amazonaws.licensemanager#EntitlementUnit",
    "traits": {
      "smithy.api#documentation": "<p>Entitlement unit.</p>",
      "smithy.api#required": {}
    }
  },
  "AllowCheckIn": {
    "target":
"com.amazonaws.licensemanager#BoxBoolean",
    "traits": {
      "smithy.api#documentation": "<p>Indicates whether check-ins are allowed.</p>"
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Describes a resource entitled for use with a license.</p>"
  }
},
"com.amazonaws.licensemanager#EntitlementData": {
  "type": "structure",
  "members": {
    "Name": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Entitlement data name.</p>",
        "smithy.api#required": {}
      }
    }
  },
  "Value": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Entitlement
data value.</p>"
    }
  },
  "Unit": {
    "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
    "traits": {
      "smithy.api#documentation": "<p>Entitlement data unit.</p>",
      "smithy.api#required": {}
    }
  }
}

```

```

    },
    "traits": {
      "smithy.api#documentation": "<p>Data associated with an entitlement resource.</p>"
    }
  },
  "com.amazonaws.licensemanager#EntitlementDataList": {
    "type": "list",
    "member": {
      "target": "com.amazonaws.licensemanager#EntitlementData"
    }
  },
  "com.amazonaws.licensemanager#EntitlementDataUnit": {
    "type": "enum",
    "members": {
      "COUNT": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "Count"
        }
      },
      "NONE": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "None"
        }
      },
      "SECONDS": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "Seconds"
        }
      },
      "MICROSECONDS": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "Microseconds"
        }
      },
      "MILLISECONDS": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "Milliseconds"
        }
      },
      "BYTES": {
        "target": "smithy.api#Unit",

```

```

    "traits": {
      "smithy.api#enumValue": "Bytes"
    }
  },
  "KILOBYTES": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Kilobytes"
    }
  },
  "MEGABYTES": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Megabytes"
    }
  },
  "GIGABYTES": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Gigabytes"
    }
  },
  "TERABYTES": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Terabytes"
    }
  },
  "BITS":
  {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Bits"
    }
  },
  "KILOBITS": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Kilobits"
    }
  },
  "MEGABITS": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Megabits"
    }
  },
  "GIGABITS": {

```

```

    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Gigabits"
    }
  },
  "TERABITS": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Terabits"
    }
  }
},
"PERCENT": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Percent"
  }
},
"BYTES_PER_SECOND": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Bytes/Second"
  }
},
"KILOBYTES_PER_SECOND": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Kilobytes/Second"
  }
},
"MEGABYTES_PER_SECOND": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Megabytes/Second"
  }
},
"GIGABYTES_PER_SECOND": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Gigabytes/Second"
  }
},
"TERABYTES_PER_SECOND": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Terabytes/Second"
  }
},

```

```

"BITS_PER_SECOND": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Bits/Second"
  }
},
"KILOBITS_PER_SECOND": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Kilobits/Second"
  }
},
"MEGABITS_PER_SECOND": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue":
"Megabits/Second"
  }
},
"GIGABITS_PER_SECOND": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Gigabits/Second"
  }
},
"TERABITS_PER_SECOND": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Terabits/Second"
  }
},
"COUNT_PER_SECOND": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Count/Second"
  }
}
},
"com.amazonaws.licensemanager#EntitlementList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#Entitlement"
  }
},
"com.amazonaws.licensemanager#EntitlementNotAllowedException":
{
  "type": "structure",

```



```

"members": {
  "Message": {
    "target": "com.amazonaws.licensemanager#Message"
  }
},
"traits": {
  "smithy.api#documentation": "<p>The entitlement is not allowed.</p>",
  "smithy.api#error": "client",
  "smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#EntitlementUnit": {
  "type": "enum",
  "members": {
    "COUNT": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Count"
      }
    },
    "NONE": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "None"
      }
    },
    "SECONDS": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Seconds"
      }
    },
    "MICROSECONDS": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Microseconds"
      }
    },
    "MILLISECONDS": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Milliseconds"
      }
    },
    "BYTES": {
      "target": "smithy.api#Unit",
      "traits": {

```

```

    "smithy.api#enumValue": "Bytes"
  }
},
"KILOBYTES": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Kilobytes"
  }
},
"MEGABYTES": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Megabytes"
  }
},
"GIGABYTES": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Gigabytes"
  }
},
"TERABYTES": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Terabytes"
  }
},
"BITS": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Bits"
  }
},
"KILOBITS": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Kilobits"
  }
},
"MEGABITS": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Megabits"
  }
},
"GIGABITS": {
  "target": "smithy.api#Unit",

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```

    "traits": {
      "smithy.api#enumValue": "Gigabits"
    }
  },
  "TERABITS": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Terabits"
    }
  },
  "PERCENT": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Percent"
    }
  },
  "BYTES_PER_SECOND": {
    "target":
"smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Bytes/Second"
    }
  },
  "KILOBYTES_PER_SECOND": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Kilobytes/Second"
    }
  },
  "MEGABYTES_PER_SECOND": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Megabytes/Second"
    }
  },
  "GIGABYTES_PER_SECOND": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Gigabytes/Second"
    }
  },
  "TERABYTES_PER_SECOND": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Terabytes/Second"
    }
  },

```

```

"BITS_PER_SECOND": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Bits/Second"
  }
},
"KILOBITS_PER_SECOND": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Kilobits/Second"
  }
},
"MEGABITS_PER_SECOND": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Megabits/Second"
  }
},
"GIGABITS_PER_SECOND": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Gigabits/Second"
  }
},
"TERABITS_PER_SECOND": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Terabits/Second"
  }
},
"COUNT_PER_SECOND": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Count/Second"
  }
}
},
"com.amazonaws.licensemanager#EntitlementUsage": {
  "type": "structure",
  "members": {
    "Name": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Entitlement usage name.</p>",
        "smithy.api#required": {}
      }
    }
  }
}

```

```

    },
    "ConsumedValue": {
      "target": "com.amazonaws.licensemanager#String",

      "traits": {
        "smithy.api#documentation": "<p>Resource usage consumed.</p>",
        "smithy.api#required": {}
      }
    },
    "MaxCount": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Maximum entitlement usage count.</p>"
      }
    },
    "Unit": {
      "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
      "traits": {
        "smithy.api#documentation": "<p>Entitlement usage unit.</p>",
        "smithy.api#required": {}
      }
    },
    "traits": {
      "smithy.api#documentation": "<p>Usage associated with an entitlement resource.</p>"
    },
    "com.amazonaws.licensemanager#EntitlementUsageList":
  {
    "type": "list",
    "member": {
      "target": "com.amazonaws.licensemanager#EntitlementUsage"
    }
  },
  "com.amazonaws.licensemanager#ExtendLicenseConsumption": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      }
    ]
  }

```

```

    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Extends the expiration date for license consumption.</p>"
  }
},
"com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest": {
  "type": "structure",
  "members": {
    "LicenseConsumptionToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>License consumption token.</p>",
        "smithy.api#required": {}
      }
    }
  },
  "DryRun": {
    "target": "com.amazonaws.licensemanager#Boolean",
    "traits": {
      "smithy.api#default": false,
      "smithy.api#documentation": "<p>Checks whether you have the required permissions for the action, without actually making the request. Provides an error response if you do not have the required permissions.</p>"
    }
  }
},
"traits": {
  "smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse": {
  "type": "structure",
  "members": {

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```

"LicenseConsumptionToken": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>License consumption token.</p>"
  }
},

"Expiration": {
  "target": "com.amazonaws.licensemanager#ISO8601DateTime",
  "traits": {
    "smithy.api#documentation": "<p>Date and time at which the license consumption expires.</p>"
  }
},
"traits": {
  "smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#FailedDependencyException": {
  "type": "structure",
  "members": {
    "Message": {
      "target": "com.amazonaws.licensemanager#Message"
    },
    "ErrorCode": {
      "target": "com.amazonaws.licensemanager#String"
    }
  },
  "traits": {
    "aws.protocols#awsQueryError": {
      "code": "FailedDependency",
      "httpResponseCode": 424
    },
    "smithy.api#documentation":
"<p>A dependency required to run the API is missing.</p>",
    "smithy.api#error": "client",
    "smithy.api#httpError": 424
  }
},
"com.amazonaws.licensemanager#Filter": {
  "type": "structure",
  "members": {
    "Name": {
      "target": "com.amazonaws.licensemanager#FilterName",
      "traits": {
        "smithy.api#documentation": "<p>Name of the filter. Filter names are case-sensitive.</p>"
      }
    }
  },
}

```

```

    "Values": {
      "target": "com.amazonaws.licensemanager#FilterValues",
      "traits": {
        "smithy.api#documentation": "<p>The value of the filter, which is case-sensitive. You can only
specify one value for the filter.</p>"
      }
    },
    "traits": {
      "smithy.api#documentation": "<p>A filter
name and value pair that is used to return more specific results from a\n      describe operation. Filters can be used
to match a set of resources by specific criteria,\n      such as tags, attributes, or IDs.</p>"
    }
  },
  "com.amazonaws.licensemanager#FilterLimitExceededException": {
    "type": "structure",
    "members": {
      "Message": {
        "target": "com.amazonaws.licensemanager#Message"
      }
    },
    "traits": {
      "aws.protocols#awsQueryError": {
        "code": "FilterLimitExceeded",
        "httpResponseCode": 400
      },
      "smithy.api#documentation": "<p>The request uses too many filters or too many filter values.</p>",
      "smithy.api#error": "client",
      "smithy.api#httpError": 400
    }
  },
  "com.amazonaws.licensemanager#FilterList": {
    "type": "list",
    "member": {
      "target": "com.amazonaws.licensemanager#Filter"
    }
  },
  "com.amazonaws.licensemanager#FilterName": {
    "type": "string"
  },
  "com.amazonaws.licensemanager#FilterValue": {
    "type": "string"
  },
  "com.amazonaws.licensemanager#FilterValues": {
    "type": "list",
    "member": {
      "target": "com.amazonaws.licensemanager#FilterValue",
      "traits": {

```



```

        "smithy.api#xmlName": "item"
    }
}
},
"com.amazonaws.licensemanager#Filters": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#Filter",
        "traits": {
            "smithy.api#xmlName": "item"
        }
    }
},
"com.amazonaws.licensemanager#GetAccessToken": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#GetAccessTokenRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetAccessTokenResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Gets a temporary access token to use with
AssumeRoleWithWebIdentity. Access
tokens\n    are valid for one hour.</p>"
    }
},
"com.amazonaws.licensemanager#GetAccessTokenRequest": {
    "type": "structure",
    "members": {
        "Token": {

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```

    "target": "com.amazonaws.licensemanager#TokenString",
    "traits": {
      "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>",
      "smithy.api#required": {}
    }
  },
  "TokenProperties": {
    "target": "com.amazonaws.licensemanager#MaxSize3StringList",
    "traits": {
      "smithy.api#documentation": "<p>Token properties to validate against those present in the JWT
token.</p>"
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#GetAccessTokenResponse":
{
  "type": "structure",
  "members": {
    "AccessToken": {
      "target": "com.amazonaws.licensemanager#TokenString",
      "traits": {
        "smithy.api#documentation": "<p>Temporary access token.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#GetGrant": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#GetGrantRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#GetGrantResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    }
  ]
}

```

```

    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Gets detailed information about the specified grant.</p>"
  }
},
"com.amazonaws.licensemanager#GetGrantRequest": {
  "type": "structure",
  "members": {
    "GrantArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
        "smithy.api#required": {}
      }
    },
    "Version": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Grant version.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#GetGrantResponse": {
  "type": "structure",
  "members": {
    "Grant": {
      "target": "com.amazonaws.licensemanager#Grant",
      "traits": {

```

```

        "smithy.api#documentation": "<p>Grant details.</p>"
    }
}
},
"traits": {

"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicense": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#GetLicenseRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetLicenseResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    {
        "target": "com.amazonaws.licensemanager#ValidationException"
    }
},
"traits": {
    "smithy.api#documentation": "<p>Gets detailed information about the specified license.</p>"
}
},
"com.amazonaws.licensemanager#GetLicenseConfiguration": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#GetLicenseConfigurationRequest"
    },
    "output": {

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    "target": "com.amazonaws.licensemanager#GetLicenseConfigurationResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Gets detailed information about the specified license
configuration.</p>"
  }
},
"com.amazonaws.licensemanager#GetLicenseConfigurationRequest": {
  "type": "structure",
  "members": {
    "LicenseConfigurationArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
        "smithy.api#required": {}
      }
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#GetLicenseConfigurationResponse": {
  "type": "structure",
  "members": {
    "LicenseConfigurationId": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Unique ID for the license configuration.</p>"
      }
    }
  }
}

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```

    }
  },
  "LicenseConfigurationArn": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
    }
  },
  "Name": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Name of the license configuration.</p>"
    }
  },
  "Description": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Description of the license configuration.</p>"
    }
  },
  "LicenseCountingType": {
    "target": "com.amazonaws.licensemanager#LicenseCountingType",
    "traits": {
      "smithy.api#documentation": "<p>Dimension for which the licenses are counted.</p>"
    }
  },
  "LicenseRules": {
    "target": "com.amazonaws.licensemanager#StringList",
    "traits": {
      "smithy.api#documentation": "<p>License rules.</p>"
    }
  },
  "LicenseCount": {
    "target": "com.amazonaws.licensemanager#BoxLong",

    "traits": {
      "smithy.api#documentation": "<p>Number of available licenses.</p>"
    }
  },
  "LicenseCountHardLimit": {
    "target": "com.amazonaws.licensemanager#BoxBoolean",
    "traits": {
      "smithy.api#documentation": "<p>Sets the number of available licenses as a hard limit.</p>"
    }
  },
  "ConsumedLicenses": {
    "target": "com.amazonaws.licensemanager#BoxLong",
    "traits": {

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    "smithy.api#documentation": "<p>Number of licenses assigned to resources.</p>"
  }
},
"Status": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>License configuration status.</p>"
  }
},
"OwnerAccountId": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Account ID of the owner of the license configuration.</p>"
  }
},
"ConsumedLicenseSummaryList": {
  "target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
  "traits": {
    "smithy.api#documentation": "<p>Summaries of the licenses consumed by resources.</p>"
  }
},
"ManagedResourceSummaryList": {
  "target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
  "traits": {
    "smithy.api#documentation": "<p>Summaries of the managed resources.</p>"
  }
},
"Tags": {
  "target": "com.amazonaws.licensemanager#TagList",
  "traits": {
    "smithy.api#documentation": "<p>Tags for the license configuration.</p>"
  }
},
"ProductInformationList": {
  "target": "com.amazonaws.licensemanager#ProductInformationList",
  "traits": {
    "smithy.api#documentation": "<p>Product information.</p>"
  }
},
"AutomatedDiscoveryInformation": {
  "target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
  "traits": {
    "smithy.api#documentation": "<p>Automated discovery information.</p>"
  }
},
"DisassociateWhenNotFound": {
  "target": "com.amazonaws.licensemanager#BoxBoolean",

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        "traits": {
            "smithy.api#documentation": "<p>When
true, disassociates a resource when software is uninstalled.</p>"
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#GetLicenseConversionTask": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#GetLicenseConversionTaskRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Gets information about the specified license type conversion task.</p>"
    }
},
"com.amazonaws.licensemanager#GetLicenseConversionTaskRequest": {
    "type": "structure",
    "members": {
        "LicenseConversionTaskId": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
            "traits": {
                "smithy.api#documentation": "<p>ID of the license type conversion task to retrieve information
on.</p>",

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        "smithy.api#required": {}
    }
}
},
"traits": {
    "smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTaskResponse": {
    "type": "structure",
    "members": {
        "LicenseConversionTaskId": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
            "traits": {
                "smithy.api#documentation": "<p>ID of the license type conversion task.</p>"
            }
        },
        "ResourceArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the resources the license
conversion task is associated with.</p>"
            }
        },
        "SourceLicenseContext": {
            "target": "com.amazonaws.licensemanager#LicenseConversionContext",
            "traits": {
                "smithy.api#documentation": "<p>Information
about the license type converted from.</p>"
            }
        },
        "DestinationLicenseContext": {
            "target": "com.amazonaws.licensemanager#LicenseConversionContext",
            "traits": {
                "smithy.api#documentation": "<p>Information about the license type converted to.</p>"
            }
        },
        "StatusMessage": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>The status message for the conversion task.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
            "traits": {
                "smithy.api#documentation": "<p>Status of the license type conversion task.</p>"
            }
        }
    }
}

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    },
    "StartTime": {
      "target": "com.amazonaws.licensemanager#DateTime",
      "traits": {
        "smithy.api#documentation": "<p>Time at which the license type conversion task was started.</p>"
      }
    },
    "LicenseConversionTime": {
      "target": "com.amazonaws.licensemanager#DateTime",
      "traits": {
        "smithy.api#documentation": "<p>Amount of time to complete the license type conversion.</p>"
      }
    },
    "EndTime": {
      "target": "com.amazonaws.licensemanager#DateTime",
      "traits": {
        "smithy.api#documentation": "<p>Time at which the license type conversion task was
completed.</p>"
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#GetLicenseManagerReportGenerator":
  {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      }
    ]
  }

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    {
      "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Gets information about the specified report generator.</p>"
  }
},
"com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest": {
  "type": "structure",
  "members": {
    "LicenseManagerReportGeneratorArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator.</p>",
        "smithy.api#required":
{}
      }
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse": {
  "type": "structure",
  "members": {
    "ReportGenerator": {
      "target": "com.amazonaws.licensemanager#ReportGenerator",
      "traits": {
        "smithy.api#documentation": "<p>A report generator that creates periodic reports about your license configurations.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
}

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    },
    "com.amazonaws.licensemanager#GetLicenseRequest": {
      "type": "structure",
      "members": {
        "LicenseArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {

"smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
          "smithy.api#required": {}
        }
      },
      "Version": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>License version.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#input": {}
    }
  },
  "com.amazonaws.licensemanager#GetLicenseResponse": {
    "type": "structure",
    "members": {
      "License": {
        "target": "com.amazonaws.licensemanager#License",
        "traits": {
          "smithy.api#documentation": "<p>License details.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#GetLicenseUsage": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#GetLicenseUsageRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#GetLicenseUsageResponse"
    },
    "errors": [
      {

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        "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
"target": "com.amazonaws.licensemanager#ValidationException"
    }
],
"traits": {
    "smithy.api#documentation": "<p>Gets detailed information about the usage of the specified license.</p>"
}
},
"com.amazonaws.licensemanager#GetLicenseUsageRequest": {
    "type": "structure",
    "members": {
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#GetLicenseUsageResponse": {
    "type": "structure",
    "members": {
        "LicenseUsage": {
            "target":
"com.amazonaws.licensemanager#LicenseUsage",
            "traits": {
                "smithy.api#documentation": "<p>License usage details.</p>"
            }
        }
    }
}

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    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#GetServiceSettings": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#GetServiceSettingsRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#GetServiceSettingsResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
      }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Gets the License Manager settings for the current Region.</p>"
    }
  },
  "com.amazonaws.licensemanager#GetServiceSettingsRequest": {
    "type": "structure",
    "members": {},
    "traits": {
      "smithy.api#input": {}
    }
  },
  "com.amazonaws.licensemanager#GetServiceSettingsResponse": {
    "type": "structure",
    "members": {
      "S3BucketArn": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Regional S3 bucket path for storing reports, license trail event data, discovery data,\n      and so on.</p>"
        }
      }
    }
  }
}

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    }
    },
    "SnsTopicArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>SNS topic configured to receive notifications from License
Manager.</p>"
      }
    },
    "OrganizationConfiguration": {
      "target": "com.amazonaws.licensemanager#OrganizationConfiguration",
      "traits": {
        "smithy.api#documentation": "<p>Indicates whether Organizations is integrated with License
Manager for\n      cross-account discovery.</p>"
      }
    },
    "EnableCrossAccountsDiscovery": {
      "target": "com.amazonaws.licensemanager#BoxBoolean",
      "traits": {
        "smithy.api#documentation": "<p>Indicates whether cross-account discovery is enabled.</p>"
      }
    }
  },
  "LicenseManagerResourceShareArn": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource share. The License
Manager management account \n      provides member accounts with access to this share.</p>"
    }
  }
},
"traits": {
  "smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#Grant": {
  "type": "structure",
  "members": {
    "GrantArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
        "smithy.api#required": {}
      }
    },
    "GrantName": {

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"target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Grant name.</p>",
    "smithy.api#required": {}
  }
},
"ParentArn": {
  "target": "com.amazonaws.licensemanager#Arn",
  "traits": {
    "smithy.api#documentation": "<p>Parent ARN.</p>",
    "smithy.api#required": {}
  }
},
"LicenseArn": {
  "target": "com.amazonaws.licensemanager#Arn",
  "traits": {
    "smithy.api#documentation": "<p>License ARN.</p>",
    "smithy.api#required": {}
  }
},
"GranteePrincipalArn": {
  "target": "com.amazonaws.licensemanager#Arn",
  "traits": {
    "smithy.api#documentation": "<p>The grantee principal ARN.</p>",
    "smithy.api#required": {}
  }
},
"HomeRegion": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Home Region of the grant.</p>",
    "smithy.api#required": {}
  }
},
"GrantStatus": {
  "target": "com.amazonaws.licensemanager#GrantStatus",
  "traits": {
    "smithy.api#documentation": "<p>Grant status.</p>",
    "smithy.api#required": {}
  }
},
"StatusReason": {
  "target": "com.amazonaws.licensemanager#StatusReasonMessage",
  "traits": {
    "smithy.api#documentation": "<p>Grant status reason.</p>"
  }
},

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"Version": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Grant version.</p>",
    "smithy.api#required": {}
  }
},
"GrantedOperations": {
  "target": "com.amazonaws.licensemanager#AllowedOperationList",
  "traits": {
    "smithy.api#documentation": "<p>Granted operations.</p>",
    "smithy.api#required": {}
  }
},
"Options": {
  "target": "com.amazonaws.licensemanager#Options",
  "traits": {
    "smithy.api#documentation": "<p>The options specified for the grant.</p>"
  }
},
"traits": {
  "smithy.api#documentation":
"<p>Describes a grant.</p>"
}
},
"com.amazonaws.licensemanager#GrantList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#Grant"
  }
},
"com.amazonaws.licensemanager#GrantStatus": {
  "type": "enum",
  "members": {
    "PENDING_WORKFLOW": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "PENDING_WORKFLOW"
      }
    },
    "PENDING_ACCEPT": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "PENDING_ACCEPT"
      }
    },
    "REJECTED": {

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    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "REJECTED"
    }
  },
  "ACTIVE": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "ACTIVE"
    }
  },
  "FAILED_WORKFLOW": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "FAILED_WORKFLOW"
    }
  },
  "DELETED": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "DELETED"
    }
  },
  "PENDING_DELETE": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "PENDING_DELETE"
    }
  },
  "DISABLED": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "DISABLED"
    }
  },
  "WORKFLOW_COMPLETED": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "WORKFLOW_COMPLETED"
    }
  }
},
"com.amazonaws.licensemanager#GrantedLicense": {
  "type": "structure",
  "members": {

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"LicenseArn": {
  "target": "com.amazonaws.licensemanager#Arn",
  "traits": {
    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
  }
},
"LicenseName": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>License name.</p>"
  }
},
"ProductName": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Product name.</p>"
  }
},
"ProductSKU": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Product SKU.</p>"
  }
},
"Issuer": {
  "target": "com.amazonaws.licensemanager#IssuerDetails",
  "traits": {
    "smithy.api#documentation": "<p>Granted license issuer.</p>"
  }
},
"HomeRegion": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Home Region of the granted license.</p>"
  }
},
>Status": {
  "target": "com.amazonaws.licensemanager#LicenseStatus",
  "traits": {
    "smithy.api#documentation": "<p>Granted license status.</p>"
  }
},
Validity": {
  "target": "com.amazonaws.licensemanager#DatetimeRange",
  "traits": {
    "smithy.api#documentation": "<p>Date and time range during which the granted license is valid, in

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ISO8601-UTC format.</p>"

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    }
  },
  "Beneficiary": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Granted license beneficiary.</p>"
    }
  },
  "Entitlements": {
    "target": "com.amazonaws.licensemanager#EntitlementList",
    "traits": {
      "smithy.api#documentation": "<p>License entitlements.</p>"
    }
  },
  "ConsumptionConfiguration": {
    "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
    "traits": {
      "smithy.api#documentation": "<p>Configuration for consumption of the license.</p>"
    }
  },
  "LicenseMetadata": {
    "target": "com.amazonaws.licensemanager#MetadataList",
    "traits": {
      "smithy.api#documentation": "<p>Granted license metadata.</p>"
    }
  },
  "CreateTime": {
    "target": "com.amazonaws.licensemanager#ISO8601DateTime",
    "traits": {
      "smithy.api#documentation": "<p>Creation time of the granted license.</p>"
    }
  }
},
"Version": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Version of the granted license.</p>"
  }
},
"ReceivedMetadata": {
  "target": "com.amazonaws.licensemanager#ReceivedMetadata",
  "traits": {
    "smithy.api#documentation": "<p>Granted license received metadata.</p>"
  }
}
},
"traits": {
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    "smithy.api#documentation": "<p>Describes a license that is granted to a grantee.</p>"
  }
},
"com.amazonaws.licensemanager#GrantedLicenseList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#GrantedLicense"
  }
},
"com.amazonaws.licensemanager#ISO8601DateTime":
{
  "type": "string",
  "traits": {
    "smithy.api#length": {
      "min": 0,
      "max": 50
    },
    "smithy.api#pattern": "^(?:(?:[1-9][0-9]*)?[0-9]{4})-(1[0-2]|0[1-9])-(3[0-1]|0[1-9]|[1-2][0-9])T(2[0-3]|[0-1][0-9]):([0-5][0-9]):([0-5][0-9])(\\.([0-9]+)?(?:Z|[-+](?:2[ 0-3]|[0-1][0-9]):[0-5][0-9])+$)"
  }
},
"com.amazonaws.licensemanager#Integer": {
  "type": "integer"
},
"com.amazonaws.licensemanager#InvalidParameterValueException": {
  "type": "structure",
  "members": {
    "Message": {
      "target": "com.amazonaws.licensemanager#Message"
    }
  },
  "traits": {
    "aws.protocols#awsQueryError": {
      "code": "InvalidParameterValueProvided",
      "httpResponseCode": 400
    },
    "smithy.api#documentation":
    "<p>One or more parameter values are not valid.</p>",
    "smithy.api#error": "client",
    "smithy.api#httpError": 400
  }
},
"com.amazonaws.licensemanager#InvalidResourceStateException": {
  "type": "structure",
  "members": {
    "Message": {
      "target": "com.amazonaws.licensemanager#Message"
    }
  }
}

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    },
    "traits": {
      "aws.protocols#awsQueryError": {
        "code": "InvalidResourceState",
        "httpResponseCode": 400
      },
      "smithy.api#documentation": "<p>License Manager cannot allocate a license to a resource because of its
state. </p>\n      <p>For example, you cannot allocate a license to an instance in the process of shutting\n
down.</p>",
      "smithy.api#error": "client",
      "smithy.api#httpError": 400
    }
  },
  "com.amazonaws.licensemanager#InventoryFilter": {
    "type": "structure",
    "members": {
      "Name": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Name of the filter.</p>",
          "smithy.api#required": {}
        }
      },
      "Condition": {
        "target": "com.amazonaws.licensemanager#InventoryFilterCondition",
        "traits": {
          "smithy.api#documentation": "<p>Condition of the filter.</p>",
          "smithy.api#required": {}
        }
      },
      "Value": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Value of the filter.</p>"
        }
      }
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>An inventory filter.</p>"
  },
  "com.amazonaws.licensemanager#InventoryFilterCondition": {
    "type": "enum",
    "members": {
      "EQUALS": {
        "target": "smithy.api#Unit",

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    "traits": {
      "smithy.api#enumValue": "EQUALS"
    }
  },
  "NOT_EQUALS": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "NOT_EQUALS"
    }
  },
  "BEGINS_WITH": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "BEGINS_WITH"
    }
  },
  "CONTAINS": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "CONTAINS"
    }
  }
},
"com.amazonaws.licensemanager#InventoryFilterList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#InventoryFilter"
  }
},
"com.amazonaws.licensemanager#Issuer": {
  "type": "structure",
  "members": {
    "Name": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Issuer name.</p>",
        "smithy.api#required": {}
      }
    }
  },
  "SignKey": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Asymmetric KMS key from Key Management Service. The KMS
key must have a key usage
of sign and verify, \n      and support the RSASSA-PSS SHA-256 signing algorithm.</p>"
    }
  }
}

```

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    },
    "traits": {
      "smithy.api#documentation": "<p>Details about the issuer of a license.</p>"
    }
  },
  "com.amazonaws.licensemanager#IssuerDetails": {
    "type": "structure",
    "members": {
      "Name": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Issuer name.</p>"
        }
      },
      "SignKey": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Asymmetric KMS key from Key Management Service. The KMS
key must have a key usage of sign and verify, \n      and support the RSASSA-PSS SHA-256 signing
algorithm.</p>"
        }
      },
      "KeyFingerprint": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Issuer key fingerprint.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#documentation": "<p>Details associated with the issuer of a license.</p>"
    }
  },
  "com.amazonaws.licensemanager#License": {
    "type": "structure",
    "members": {
      "LicenseArn": {
        "target": "com.amazonaws.licensemanager#Arn",
        "traits": {
          "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
        }
      },
      "LicenseName": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>License name.</p>"
        }
      }
    }
  }
}

```



```

},
"ProductName": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Product name.</p>"
  }
},
"ProductSKU": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Product SKU.</p>"
  }
},
"Issuer": {
  "target": "com.amazonaws.licensemanager#IssuerDetails",
  "traits": {
    "smithy.api#documentation": "<p>License issuer.</p>"
  }
},
"HomeRegion": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Home Region of the license.</p>"
  }
},
"Status": {
  "target": "com.amazonaws.licensemanager#LicenseStatus",
  "traits": {
    "smithy.api#documentation": "<p>License status.</p>"
  }
},
"Validity": {
  "target": "com.amazonaws.licensemanager#DatetimeRange",
  "traits": {
    "smithy.api#documentation": "<p>Date and time range during which the license is valid, in ISO8601-
UTC format.</p>"
  }
},
"Beneficiary": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>License beneficiary.</p>"
  }
},
"Entitlements": {

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"target": "com.amazonaws.licensemanager#EntitlementList",
  "traits": {
    "smithy.api#documentation": "<p>License entitlements.</p>"
  }
},
"ConsumptionConfiguration": {
  "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
  "traits": {
    "smithy.api#documentation": "<p>Configuration for consumption of the license.</p>"
  }
},
"LicenseMetadata": {
  "target": "com.amazonaws.licensemanager#MetadataList",
  "traits": {
    "smithy.api#documentation": "<p>License metadata.</p>"
  }
},
"CreateTime": {
  "target": "com.amazonaws.licensemanager#ISO8601DateTime",
  "traits": {
    "smithy.api#documentation": "<p>License
creation time.</p>"
  }
},
"Version": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>License version.</p>"
  }
},
"traits": {
  "smithy.api#documentation": "<p>Software license that is managed in License Manager.</p>"
},
"com.amazonaws.licensemanager#LicenseConfiguration": {
  "type": "structure",
  "members": {
    "LicenseConfigurationId": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Unique ID of the license configuration.</p>"
      }
    },
    "LicenseConfigurationArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
      }
    }
  }
}

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```

    }
  },
  "Name": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Name of the license configuration.</p>"
    }
  },
  "Description": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Description of the license configuration.</p>"
    }
  },
  "LicenseCountingType": {
    "target": "com.amazonaws.licensemanager#LicenseCountingType",
    "traits": {
      "smithy.api#documentation": "<p>Dimension to use to track the license inventory.</p>"
    }
  },
  "LicenseRules": {
    "target": "com.amazonaws.licensemanager#StringList",
    "traits": {
      "smithy.api#documentation": "<p>License rules.</p>"
    }
  },
  "LicenseCount": {
    "target": "com.amazonaws.licensemanager#BoxLong",
    "traits": {
      "smithy.api#documentation": "<p>Number of licenses managed by the license configuration.</p>"
    }
  },
  "LicenseCountHardLimit": {
    "target": "com.amazonaws.licensemanager#BoxBoolean",
    "traits": {
      "smithy.api#documentation": "<p>Number of available licenses as a hard limit.</p>"
    }
  },
  "DisassociateWhenNotFound": {
    "target": "com.amazonaws.licensemanager#BoxBoolean",
    "traits": {
      "smithy.api#documentation": "<p>When true, disassociates a resource when software is
uninstalled.</p>"
    }
  },
  "ConsumedLicenses": {
    "target": "com.amazonaws.licensemanager#BoxLong",
    "traits": {

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    "smithy.api#documentation": "<p>Number of licenses consumed. </p>"
  }
},
"Status": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Status of the license configuration.</p>"
  }
},
"OwnerAccountId": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Account ID of the license configuration's owner.</p>"
  }
},
"ConsumedLicenseSummaryList": {
  "target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
  "traits": {
    "smithy.api#documentation": "<p>Summaries for licenses consumed by various resources.</p>"
  }
},
"ManagedResourceSummaryList": {
  "target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
  "traits": {
    "smithy.api#documentation": "<p>Summaries for managed resources.</p>"
  }
},
"ProductInformationList": {
  "target": "com.amazonaws.licensemanager#ProductInformationList",
  "traits": {
    "smithy.api#documentation": "<p>Product information.</p>"
  }
},
"AutomatedDiscoveryInformation": {
  "target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
  "traits": {
    "smithy.api#documentation": "<p>Automated discovery information.</p>"
  }
},
"traits": {
  "smithy.api#documentation": "<p>A license configuration is an abstraction of a customer license agreement that can be consumed and enforced by License Manager. Components include specifications for the license type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, Dedicated Instance, Dedicated Host, or all of these), host affinity (how long a VM must be associated with a host), and the number of licenses purchased and used.</p>"
}

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    }
  },
  "com.amazonaws.licensemanager#LicenseConfigurationAssociation": {
    "type": "structure",
    "members": {
      "ResourceArn": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
        }
      },
      "ResourceType": {
        "target": "com.amazonaws.licensemanager#ResourceType",
        "traits": {
          "smithy.api#documentation": "<p>Type of server resource.</p>"
        }
      },
      "ResourceOwnerId": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>ID of the Amazon Web Services account that owns the resource consuming licenses.</p>"
        }
      },
      "AssociationTime": {
        "target": "com.amazonaws.licensemanager#DateTime",
        "traits": {
          "smithy.api#documentation": "<p>Time when the license configuration was associated with the resource.</p>"
        }
      },
      "AmiAssociationScope": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Scope of AMI associations. The possible value is <code>cross-account</code>.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#documentation": "<p>Describes an association with a license configuration.</p>"
    }
  },
  "com.amazonaws.licensemanager#LicenseConfigurationAssociations": {
    "type": "list",
    "member": {
      "target": "com.amazonaws.licensemanager#LicenseConfigurationAssociation"
    }
  }
}

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    }
  },
  "com.amazonaws.licensemanager#LicenseConfigurationStatus": {
    "type": "enum",
    "members":
  {
    "AVAILABLE": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "AVAILABLE"
      }
    },
    "DISABLED": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "DISABLED"
      }
    }
  }
},
"com.amazonaws.licensemanager#LicenseConfigurationUsage": {
  "type": "structure",
  "members": {
    "ResourceArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
      }
    },
    "ResourceType": {
      "target": "com.amazonaws.licensemanager#ResourceType",
      "traits":
    {
      "smithy.api#documentation": "<p>Type of resource.</p>"
    }
  },
  "ResourceStatus": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Status of the resource.</p>"
    }
  },
  "ResourceOwnerId": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>ID of the account that owns the resource.</p>"
    }
  },
}

```

```

    "AssociationTime": {
      "target": "com.amazonaws.licensemanager#DateTime",
      "traits": {
        "smithy.api#documentation": "<p>Time when the license configuration was initially associated with
the resource.</p>"
      }
    },

    "ConsumedLicenses": {
      "target": "com.amazonaws.licensemanager#BoxLong",
      "traits": {
        "smithy.api#documentation": "<p>Number of licenses consumed by the resource.</p>"
      }
    },
    "traits": {
      "smithy.api#documentation": "<p>Details about the usage of a resource associated with a license
configuration.</p>"
    },
    "com.amazonaws.licensemanager#LicenseConfigurationUsageList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#LicenseConfigurationUsage"
      }
    },
    "com.amazonaws.licensemanager#LicenseConfigurations": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#LicenseConfiguration"
      }
    },
    "com.amazonaws.licensemanager#LicenseConversionContext": {

      "type": "structure",
      "members": {
        "UsageOperation": {
          "target": "com.amazonaws.licensemanager#UsageOperation",
          "traits": {
            "smithy.api#documentation": "<p>The Usage operation value that corresponds to the license type you
are converting your resource from. For more information about which platforms correspond to which usage
operation values see <a href=\"https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/billing-info-
fields.html#billing-info\">Sample data: usage operation by platform\n  </a>\n  </p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Information about a license type conversion task.</p>"
      }
    }
  }

```

```

    }
  },
  "com.amazonaws.licensemanager#LicenseConversionTask": {
    "type": "structure",
    "members": {
      "LicenseConversionTaskId": {

        "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
        "traits": {
          "smithy.api#documentation": "<p>The ID of the license type conversion task.</p>"
        }
      },
      "ResourceArn": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource associated
with the license type\n      conversion task.</p>"
        }
      },
      "SourceLicenseContext": {
        "target": "com.amazonaws.licensemanager#LicenseConversionContext",
        "traits": {
          "smithy.api#documentation": "<p>Information about the license type this conversion task converted
from.</p>"
        }
      },
      "DestinationLicenseContext": {
        "target":
"com.amazonaws.licensemanager#LicenseConversionContext",
        "traits": {
          "smithy.api#documentation": "<p>Information about the license type this conversion task converted
to.</p>"
        }
      },
      "Status": {
        "target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
        "traits": {
          "smithy.api#documentation": "<p>The status of the conversion task.</p>"
        }
      },
      "StatusMessage": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>The status message for the conversion task.</p>"
        }
      },
      "StartTime": {
        "target": "com.amazonaws.licensemanager#DateTime",

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```

    "traits": {
      "smithy.api#documentation":
"<p>The time the conversion task was started at.</p>"
    }
  },
  "LicenseConversionTime": {
    "target": "com.amazonaws.licensemanager#DateTime",
    "traits": {
      "smithy.api#documentation": "<p>The time the usage operation value of the resource was
changed.</p>"
    }
  },
  "EndTime": {
    "target": "com.amazonaws.licensemanager#DateTime",
    "traits": {
      "smithy.api#documentation": "<p>The time the conversion task was completed.</p>"
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Information about a license type conversion task.</p>"
  }
},
"com.amazonaws.licensemanager#LicenseConversionTaskId": {
  "type": "string",
  "traits": {

    "smithy.api#length": {
      "min": 0,
      "max": 50
    },
    "smithy.api#pattern": "^\\lct-[a-zA-Z0-9]*$"
  }
},
"com.amazonaws.licensemanager#LicenseConversionTaskStatus": {
  "type": "enum",
  "members": {
    "IN_PROGRESS": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "IN_PROGRESS"
      }
    },
    "SUCCEEDED": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "SUCCEEDED"
      }
    }
  }
}

```

```

    },
    "FAILED": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "FAILED"
      }
    }
  },
  "com.amazonaws.licensemanager#LicenseConversionTasks":
  {
    "type": "list",
    "member": {
      "target": "com.amazonaws.licensemanager#LicenseConversionTask"
    }
  },
  "com.amazonaws.licensemanager#LicenseCountingType": {
    "type": "enum",
    "members": {
      "VCPU": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "vCPU"
        }
      },
      "INSTANCE": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "Instance"
        }
      },
      "CORE": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "Core"
        }
      },
      "SOCKET": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "Socket"
        }
      }
    }
  },
  "com.amazonaws.licensemanager#LicenseDeletionStatus": {
    "type": "enum",
    "members": {

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```

"PENDING_DELETE": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "PENDING_DELETE"
  }
},
"DELETED": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "DELETED"
  }
}
},
"com.amazonaws.licensemanager#LicenseList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#License"
  }
},
"com.amazonaws.licensemanager#LicenseOperationFailure": {

  "type": "structure",
  "members": {
    "ResourceArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
      }
    },
    "ResourceType": {
      "target": "com.amazonaws.licensemanager#ResourceType",
      "traits": {
        "smithy.api#documentation": "<p>Resource type.</p>"
      }
    },
    "ErrorMessage": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Error message.</p>"
      }
    },
    "FailureTime": {
      "target": "com.amazonaws.licensemanager#DateTime",
      "traits": {

"smithy.api#documentation": "<p>Failure time.</p>"
      }
}

```

```

    },
    "OperationName": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Name of the operation.</p>"
      }
    },
    "ResourceOwnerId": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>ID of the Amazon Web Services account that owns the
resource.</p>"
      }
    },
    "OperationRequestedBy": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>The requester is \"License Manager Automated Discovery\".</p>"
      }
    },
    "MetadataList": {
      "target": "com.amazonaws.licensemanager#MetadataList",
      "traits": {
        "smithy.api#documentation": "<p>Reserved.</p>"
      }
    },
    "traits": {
      "smithy.api#documentation": "<p>Describes the failure of a license operation.</p>"
    },
    "com.amazonaws.licensemanager#LicenseOperationFailureList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#LicenseOperationFailure"
      }
    },
    "com.amazonaws.licensemanager#LicenseSpecification": {
      "type": "structure",
      "members": {
        "LicenseConfigurationArn": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",

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    "smithy.api#required": {}
  },
  "AmiAssociationScope": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Scope of AMI associations. The possible value is <code>cross-account</code>.</p>"
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Details for associating a license configuration with a resource.</p>"
  },
  "com.amazonaws.licensemanager#LicenseSpecifications": {
    "type": "list",
    "member": {
      "target": "com.amazonaws.licensemanager#LicenseSpecification"
    }
  },
  "com.amazonaws.licensemanager#LicenseStatus": {
    "type": "enum",
    "members": {
      "AVAILABLE": {
        "target": "smithy.api#Unit",

        "traits": {
          "smithy.api#enumValue": "AVAILABLE"
        }
      },
      "PENDING_AVAILABLE": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "PENDING_AVAILABLE"
        }
      },
      "DEACTIVATED": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "DEACTIVATED"
        }
      },
      "SUSPENDED": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "SUSPENDED"
        }
      }
    }
  }
}

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```

    },
    "EXPIRED": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "EXPIRED"
      }
    },
    "PENDING_DELETE": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "PENDING_DELETE"
      }
    },
    "DELETED": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "DELETED"
      }
    }
  },
  "com.amazonaws.licensemanager#LicenseUsage": {
    "type": "structure",
    "members": {
      "EntitlementUsages": {
        "target": "com.amazonaws.licensemanager#EntitlementUsageList",
        "traits": {
          "smithy.api#documentation": "<p>License entitlement usages.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#documentation": "<p>Describes the entitlement usage associated with a license.</p>"
    }
  },
  "com.amazonaws.licensemanager#LicenseUsageException": {
    "type": "structure",
    "members": {
      "Message": {
        "target": "com.amazonaws.licensemanager#Message"
      }
    },
    "traits": {
      "aws.protocols#awsQueryError": {
        "code": "LicenseUsageFailure",
        "httpResponseCode": 412
      }
    }
  }

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    },
    "smithy.api#documentation": "<p>You do not have enough licenses available to support a new resource
launch.</p>",
    "smithy.api#error": "client",
    "smithy.api#httpError": 412
  }
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Lists the resource associations for the
specified license configuration.</p>\n    <p>Resource associations need not consume licenses from a license
configuration. \n    For example, an AMI or a stopped instance might not consume a license (depending on \n
the license rules).</p>"
  }
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest": {
  "type": "structure",
  "members": {
    "LicenseConfigurationArn": {
      "target": "com.amazonaws.licensemanager#String",

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    "traits": {
      "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of a license configuration.</p>",
      "smithy.api#required": {}
    }
  },
  "MaxResults": {
    "target": "com.amazonaws.licensemanager#BoxInteger",
    "traits": {
      "smithy.api#documentation": "<p>Maximum number of results
to return in a single call.</p>"
    }
  },
  "NextToken": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Token for the next set of results.</p>"
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse": {
  "type": "structure",
  "members": {
    "LicenseConfigurationAssociations": {
      "target": "com.amazonaws.licensemanager#LicenseConfigurationAssociations",
      "traits": {
        "smithy.api#documentation": "<p>Information about the associations for the license
configuration.</p>"
      }
    },
    "NextToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#ListDistributedGrants": {
  "type": "operation",
  "input": {

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    "target": "com.amazonaws.licensemanager#ListDistributedGrantsRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#ListDistributedGrantsResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Lists the grants distributed for the specified license.</p>"
  }
},
"com.amazonaws.licensemanager#ListDistributedGrantsRequest": {
  "type": "structure",
  "members": {
    "GrantArns": {
      "target": "com.amazonaws.licensemanager#ArnList",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the grants.</p>"
      }
    },
    "Filters": {
      "target": "com.amazonaws.licensemanager#FilterList",
      "traits": {
        "smithy.api#documentation": "<p>Filters to scope the results. The following filters are supported:</p>\n
        <ul>\n
        <li>\n
        <p>\n
        <code>LicenseArn</code>\n
        </p>\n
        </li>\n
        <li>\n
        <p>\n
        <code>GrantStatus</code>\n
        </p>\n
        </li>\n
      }
    }
  }
}

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    <li>\n      <p>\n        <code>GranteePrincipalARN</code>\n      </p>\n    </li>\n    <li>\n      <p>\n        <code>ProductSKU</code>\n      </p>\n    </li>\n    <p>\n      <code>LicenseIssuerName</code>\n    </p>\n  </ul>\n  }\n  },\n  "NextToken": {\n    "target": "com.amazonaws.licensemanager#String",\n    "traits": {\n      "smithy.api#documentation": "<p>Token for the next set of results.</p>"\n    }\n  },\n  "MaxResults": {\n    "target": "com.amazonaws.licensemanager#MaxSize100",\n    "traits": {\n      "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"\n    }\n  },\n  "traits": {\n    "smithy.api#input": {}\n  }\n},\n"com.amazonaws.licensemanager#ListDistributedGrantsResponse": {\n  "type": "structure",\n  "members": {\n    "Grants": {\n      "target": "com.amazonaws.licensemanager#GrantList",\n\n      "traits": {\n        "smithy.api#documentation": "<p>Distributed grant details.</p>"\n      }\n    },\n    "NextToken": {\n      "target": "com.amazonaws.licensemanager#String",\n      "traits": {\n        "smithy.api#documentation": "<p>Token for the next set of results.</p>"\n      }\n    }\n  },\n  "traits": {\n    "smithy.api#output": {}\n  }\n},\n"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations": {\n  "type": "operation",\n  "input": {\n    "target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest"

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    },
    "output": {
      "target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
      }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Lists the license configuration operations that failed.</p>"
    }
  },
  "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest": {
    "type": "structure",
    "members": {
      "LicenseConfigurationArn": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Amazon Resource Name of the license configuration.</p>",
          "smithy.api#required": {}
        }
      },
      "MaxResults": {
        "target": "com.amazonaws.licensemanager#BoxInteger",
        "traits": {
          "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
        }
      },
      "NextToken": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Token for the next set of results.</p>"
        }
      }
    }
  }
}

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    },
    "traits": {
      "smithy.api#input": {}
    }
  },
  "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse":
  {
    "type": "structure",
    "members": {
      "LicenseOperationFailureList": {
        "target": "com.amazonaws.licensemanager#LicenseOperationFailureList",
        "traits": {
          "smithy.api#documentation": "<p>License configuration operations that failed.</p>"
        }
      },
      "NextToken": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Token for the next set of results.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#ListLicenseConfigurations": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      }
    ]
  }
}

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    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Lists the license configurations
for your account.</p>"
  }
},
"com.amazonaws.licensemanager#ListLicenseConfigurationsRequest": {
  "type": "structure",
  "members": {
    "LicenseConfigurationArns": {
      "target": "com.amazonaws.licensemanager#StringList",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the license
configurations.</p>"
      }
    },
    "MaxResults": {
      "target": "com.amazonaws.licensemanager#BoxInteger",
      "traits": {
        "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
      }
    },
    "NextToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next
set of results.</p>"
      }
    },
    "Filters": {
      "target": "com.amazonaws.licensemanager#Filters",
      "traits": {
        "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
operators\n are supported:</p>\n <ul>\n <li>\n <p>\n
<code>licenseCountingType</code> - The dimension for which licenses are counted.\n Possible values are
<code>vCPU</code> | <code>Instance</code> | <code>Core</code> | <code>Socket</code>.\n Logical
operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n </li>\n <li>\n
<p>\n <code>enforceLicenseCount</code> - A Boolean value that indicates whether hard license
enforcement is used. \n Logical operators are <code>EQUALS</code> |
<code>NOT_EQUALS</code>.</p>\n
</li>\n <li>\n <p>\n <code>usagelimitExceeded</code> - A Boolean value that
indicates whether the available licenses have been exceeded. \n Logical operators are

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<code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n      </li>\n    </ul>"
    }
  }
},
"traits": {
  "smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicenseConfigurationsResponse": {
  "type": "structure",
  "members": {
    "LicenseConfigurations": {
      "target": "com.amazonaws.licensemanager#LicenseConfigurations",
      "traits": {
        "smithy.api#documentation": "<p>Information about the license configurations.</p>"
      }
    },
    "NextToken": {
      "target": "com.amazonaws.licensemanager#String",

      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#ListLicenseConversionTasks": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {

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        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
    }
],
"traits": {
    "smithy.api#documentation": "<p>Lists the license type conversion tasks for your account.</p>"
}
},
"com.amazonaws.licensemanager#ListLicenseConversionTasksRequest": {
    "type": "structure",
    "members": {
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        },
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        },
        "Filters": {
            "target": "com.amazonaws.licensemanager#Filters",
            "traits": {
                "smithy.api#documentation": "<p>\n    Filters to scope the results. Valid filters are
<code>ResourceArns</code> and <code>Status</code>.\n    </p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#ListLicenseConversionTasksResponse": {
    "type": "structure",
    "members": {
        "LicenseConversionTasks": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTasks",
            "traits": {
                "smithy.api#documentation": "<p>Information about the license configuration tasks for your
account.</p>"
            }
        }
    },
}

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    "NextToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    },
    "traits": {
      "smithy.api#output": {}
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target":
"com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
          "target": "com.amazonaws.licensemanager#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Lists the report generators for your account.</p>"
      }
    }
  }
}

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    }
  },
  "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest":
  {
    "type": "structure",
    "members": {
      "Filters": {
        "target": "com.amazonaws.licensemanager#FilterList",
        "traits": {
          "smithy.api#documentation": "<p>Filters to scope the results. The following filters are supported:
</p>\n  <ul>\n    <li>\n      <p>\n        <code>LicenseConfigurationArn</code>\n      </li>\n    </ul>"
        }
      },
      "NextToken": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Token for the next set of results.</p>"
        }
      },
      "MaxResults": {
        "target": "com.amazonaws.licensemanager#MaxSize100",
        "traits": {
          "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#input": {}
    }
  },
  "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse": {
    "type": "structure",
    "members": {
      "ReportGenerators": {
        "target": "com.amazonaws.licensemanager#ReportGeneratorList",
        "traits": {
          "smithy.api#documentation": "<p>A report generator that creates periodic reports about your license
configurations.</p>"
        }
      },
      "NextToken": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Token for the next set of results.</p>"
        }
      }
    }
  }
}

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    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResource": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Describes the license configurations for the specified resource.</p>"
  }
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest": {
  "type": "structure",
  "members": {
    "ResourceArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of a resource that has an associated license configuration.</p>",
        "smithy.api#required": {}
      }
    },
    "MaxResults": {
      "target": "com.amazonaws.licensemanager#BoxInteger",

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    "traits": {
      "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
    }
  },
  "NextToken": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Token for the next set of results.</p>"
    }
  }
},
"traits": {
  "smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse": {
  "type": "structure",
  "members": {
    "LicenseSpecifications": {
      "target": "com.amazonaws.licensemanager#LicenseSpecifications",
      "traits": {
        "smithy.api#documentation": "<p>License configurations associated with a resource.</p>"
      }
    },
    "NextToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#ListLicenseVersions": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#ListLicenseVersionsRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#ListLicenseVersionsResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    }
  ],

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    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Lists all versions of the specified license.</p>"
  }
},
"com.amazonaws.licensemanager#ListLicenseVersionsRequest": {
  "type": "structure",
  "members": {
    "LicenseArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
        "smithy.api#required": {}
      }
    },
    "NextToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    },
    "MaxResults": {
      "target": "com.amazonaws.licensemanager#MaxSize100",
      "traits": {
        "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#ListLicenseVersionsResponse": {
  "type": "structure",
  "members": {
    "Licenses": {

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        "target": "com.amazonaws.licensemanager#LicenseList",
        "traits": {
            "smithy.api#documentation": "<p>License details.</p>"
        }
    },

    "NextToken": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},

"com.amazonaws.licensemanager#ListLicenses": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListLicensesRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListLicensesResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists the licenses for your account.</p>"
    }
}

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```

    },
    "com.amazonaws.licensemanager#ListLicensesRequest": {
      "type": "structure",
      "members": {
        "LicenseArns": {
          "target": "com.amazonaws.licensemanager#ArnList",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the licenses.</p>"
          }
        }
      },

      "Filters": {
        "target": "com.amazonaws.licensemanager#FilterList",
        "traits": {
          "smithy.api#documentation": "<p>Filters to scope the results. The following filters are supported:</p>\n
          <ul>\n
            <li>\n
              <p>\n
                <code>Beneficiary</code>\n
              </li>\n
            <li>\n
              <p>\n
                <code>ProductSKU</code>\n
              </p>\n
            </li>\n
            <p>\n
              <code>Fingerprint</code>\n
            </p>\n
            <li>\n
              <li>\n
                <p>\n
                  <code>Status</code>\n
                </p>\n
              </li>\n
            </li>\n
          </ul>"
        }
      },
      "NextToken": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Token for the next set of results.</p>"
        }
      },
      "MaxResults": {
        "target": "com.amazonaws.licensemanager#MaxSize100",
        "traits": {
          "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#input": {}
    }
  },
  "com.amazonaws.licensemanager#ListLicensesResponse": {
    "type": "structure",
    "members": {
      "Licenses": {
        "target": "com.amazonaws.licensemanager#LicenseList",
        "traits": {
          "smithy.api#documentation": "<p>License details.</p>"
        }
      }
    },
  },

```

```

    "NextToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    },
    "traits": {
      "smithy.api#output": {}
    },
    "com.amazonaws.licensemanager#ListReceivedGrants": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#ListReceivedGrantsRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#ListReceivedGrantsResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
          "target": "com.amazonaws.licensemanager#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Lists grants that are received. Received grants are grants created while specifying the\n    recipient as this Amazon Web Services account, your organization, or an organizational unit\n    (OU) to which this member account belongs.</p>"
      }
    }
  }

```

```

    },
    "com.amazonaws.licensemanager#ListReceivedGrantsForOrganization": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
          "target":
"com.amazonaws.licensemanager#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Lists the grants received for all accounts in the organization.</p>"
      }
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest": {
      "type": "structure",
      "members": {
        "LicenseArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the received license.</p>",
            "smithy.api#required": {}
          }
        },
        "Filters": {

```



```

        "target": "com.amazonaws.licensemanager#FilterList",
        "traits": {
            "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n
<ul>\n
<li>\n
<p>\n
<code>ParentArn</code>\n
</p>\n
</li>\n
<li>\n
<p>\n
<code>GranteePrincipalArn</code>\n
</p>\n
</li>\n
</ul>"
        }
    },
    "NextToken": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
        }
    },
    "MaxResults": {
        "target": "com.amazonaws.licensemanager#MaxSize100",
        "traits": {
            "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
        }
    }
},
"traits": {
    "smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse":
{
    "type": "structure",
    "members": {
        "Grants": {
            "target": "com.amazonaws.licensemanager#GrantList",
            "traits": {
                "smithy.api#documentation": "<p>Lists the grants the organization has received.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListReceivedGrantsRequest": {
    "type": "structure",

```

```

"members": {
  "GrantArns": {
    "target": "com.amazonaws.licensemanager#ArnList",
    "traits": {
      "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the grants.</p>"
    }
  },
  "Filters": {
    "target": "com.amazonaws.licensemanager#FilterList",
    "traits": {
      "smithy.api#documentation": "<p>Filters to scope the results. The following filters are supported:</p>\n
      <ul>\n
        <li>\n
          <p>\n
            <code>ProductSKU</code>\n
          </p>\n
        </li>\n
        <li>\n
          <p>\n
            <code>LicenseIssuerName</code>\n
          </p>\n
        </li>\n
        <li>\n
          <p>\n
            <code>LicenseArn</code>\n
          </p>\n
        </li>\n
        <li>\n
          <p>\n
            <code>GrantStatus</code>\n
          </p>\n
        </li>\n
        <li>\n
          <p>\n
            <code>GranterAccountId</code>\n
          </p>\n
        </li>\n
      </ul>"
    }
  },
  "NextToken": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Token for the next set of results.</p>"
    }
  },
  "MaxResults": {
    "target": "com.amazonaws.licensemanager#MaxSize100",
    "traits": {
      "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
    }
  }
},
"traits": {
  "smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsResponse": {
  "type": "structure",
  "members": {
    "Grants": {
      "target": "com.amazonaws.licensemanager#GrantList",
      "traits": {
        "smithy.api#documentation": "<p>Received grant details.</p>"
      }
    },
    "NextToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {

```

```

        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
    }
}
},
"traits": {
    "smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedLicenses": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListReceivedLicensesRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListReceivedLicensesResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists received licenses.</p>"
    }
},
"com.amazonaws.licensemanager#ListReceivedLicensesForOrganization":
{
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest"
    }
}

```

```

    },
    "output": {
      "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
      },
      {
        "target": "com.amazonaws.licensemanager#ValidationException"
      }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Lists the licenses received for all accounts in the organization.</p>"
    }
  },
  "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest": {
    "type": "structure",
    "members": {
      "Filters": {
        "target": "com.amazonaws.licensemanager#FilterList",
        "traits": {
          "smithy.api#documentation": "<p>Filters to scope the results. The following filters are supported:</p>\n      <ul>\n        <li>\n          <p>\n            <code>Beneficiary</code>\n          </li>\n        <li>\n          <p>\n            <code>ProductSKU</code>\n          </p>\n        </li>\n      </ul>"
        }
      },
      "NextToken": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Token for the next set of results.</p>"
        }
      }
    }
  }
}

```

```

    }
  },
  "MaxResults": {
    "target": "com.amazonaws.licensemanager#MaxSize100",
    "traits": {
      "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
    }
  }
},
"traits": {
  "smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse": {
  "type": "structure",
  "members": {
    "Licenses": {
      "target": "com.amazonaws.licensemanager#GrantedLicenseList",
      "traits": {
        "smithy.api#documentation": "<p>Lists the licenses the organization has received.</p>"
      }
    },
    "NextToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#ListReceivedLicensesRequest": {
  "type": "structure",
  "members": {
    "LicenseArns": {
      "target": "com.amazonaws.licensemanager#ArnList",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the licenses.</p>"
      }
    }
  },
  "Filters": {
    "target": "com.amazonaws.licensemanager#FilterList",
    "traits": {
      "smithy.api#documentation": "<p>Filters to scope the results. The following filters are supported:</p>\n    <ul>\n      <li>\n        <p>\n          <code>ProductSKU</code>\n        </p>\n"
    }
  }
}

```



```

},
"output": {
  "target": "com.amazonaws.licensemanager#ListResourceInventoryResponse"
},
"errors": [
  {
    "target": "com.amazonaws.licensemanager#AccessDeniedException"
  },
  {
    "target": "com.amazonaws.licensemanager#AuthorizationException"
  },
  {
    "target": "com.amazonaws.licensemanager#FailedDependencyException"
  },
  {
    "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
  },
  {
    "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
  },
  {
    "target": "com.amazonaws.licensemanager#RateLimitExceededException"
  },
  {
    "target": "com.amazonaws.licensemanager#ServerInternalException"
  }
],
"traits": {
  "smithy.api#documentation": "<p>Lists resources managed using Systems Manager inventory.</p>"
}
},
"com.amazonaws.licensemanager#ListResourceInventoryRequest": {
  "type": "structure",
  "members": {
    "MaxResults": {
      "target": "com.amazonaws.licensemanager#BoxInteger",
      "traits": {
        "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
      }
    },
    "NextToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    },
    "Filters": {
      "target": "com.amazonaws.licensemanager#InventoryFilterList",

```

```

    "traits": {
      "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
operators\n    are supported:</p>\n    <ul>\n      <li>\n        <p>\n          <code>account_id</code>
- The ID of the Amazon Web Services account that owns the resource.\n          Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n        </li>\n      <li>\n        <p>\n          <code>application_name</code> - The name of the
application. \n          Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>.</p>\n        </li>\n      <li>\n        <p>\n          <code>license_included</code> - The type of license included. \n
Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.\n          Possible values
are <code>sql-server-enterprise</code> | \n          <code>sql-server-standard</code> | \n          <code>sql-
server-web</code> | \n          <code>windows-server-datacenter</code>.</p>\n        </li>\n      <li>\n        <p>\n          <code>platform</code> - The platform of the resource.\n          Logical operators are
<code>EQUALS</code> | <code>BEGINS_WITH</code>.</p>\n        </li>\n      <li>\n        <p>\n          <code>resource_id</code> - The ID of the resource. \n          Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n        </li>\n      <li>\n        <p>\n          <code>tag:<key></code> - The key/value combination of a tag assigned \n          to the resource. Logical
operators are <code>EQUALS</code> (single account) or\n          <code>EQUALS</code> |
<code>NOT_EQUALS</code> (cross account).</p>\n        </li>\n    </ul>"
    }
  }
},
"traits": {
  "smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListResourceInventoryResponse": {
  "type": "structure",
  "members": {
    "ResourceInventoryList": {
      "target": "com.amazonaws.licensemanager#ResourceInventoryList",
      "traits": {
        "smithy.api#documentation": "<p>Information
about the resources.</p>"
      }
    },
    "NextToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    }
  }
},
"traits": {
  "smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListTagsForResource": {
  "type": "operation",

```



```

"input": {
  "target": "com.amazonaws.licensemanager#ListTagsForResourceRequest"
},
"output": {
  "target": "com.amazonaws.licensemanager#ListTagsForResourceResponse"
},
"errors": [
  {
    "target": "com.amazonaws.licensemanager#AccessDeniedException"
  },
  {
    "target": "com.amazonaws.licensemanager#AuthorizationException"
  },
  {
    "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
  },
  {
    "target": "com.amazonaws.licensemanager#RateLimitExceededException"
  },
  {
    "target": "com.amazonaws.licensemanager#ServerInternalException"
  }
],
"traits": {
  "smithy.api#documentation": "<p>Lists the tags for the specified license configuration.</p>"
}
},
"com.amazonaws.licensemanager#ListTagsForResourceRequest": {
  "type": "structure",
  "members": {
    "ResourceArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>",
        "smithy.api#required": {}
      }
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#ListTagsForResourceResponse": {
  "type": "structure",
  "members": {
    "Tags": {

```

```

        "target": "com.amazonaws.licensemanager#TagList",
        "traits": {
            "smithy.api#documentation": "<p>Information about the tags.</p>"
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListTokens": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListTokensRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListTokensResponse"
    },
    "errors":
    [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists your tokens.</p>"
    }
},
"com.amazonaws.licensemanager#ListTokensRequest": {
    "type": "structure",
    "members": {
        "TokenIds": {
            "target": "com.amazonaws.licensemanager#StringList",
            "traits": {

```

```

    "smithy.api#documentation": "<p>Token IDs.</p>"
  }
},
"Filters": {
  "target": "com.amazonaws.licensemanager#FilterList",
  "traits": {
    "smithy.api#documentation": "<p>Filters to scope the results. The following filter is supported:</p>\n
<ul>\n
  <li>\n
    <p>\n
      <code>LicenseArns</code>\n
    </p>\n
  </li>\n
</ul>"
  }
},
"NextToken": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
  }
},
"MaxResults": {
  "target": "com.amazonaws.licensemanager#MaxSize100",
  "traits": {
    "smithy.api#documentation":
"<p>Maximum number of results to return in a single call.</p>"
  }
},
"traits": {
  "smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListTokensResponse": {
  "type": "structure",
  "members": {
    "Tokens": {
      "target": "com.amazonaws.licensemanager#TokenList",
      "traits": {
        "smithy.api#documentation": "<p>Received token details.</p>"
      }
    },
    "NextToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
}

```

```

    },
    "com.amazonaws.licensemanager#ListUsageForLicenseConfiguration":
    {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists all license usage records for a license configuration, displaying license consumption details by resource at a selected point in time. Use this action to audit the current license consumption for any license inventory and configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>",
                    "smithy.api#required": {}
                }
            }
        }
    },

```

```

    "MaxResults": {
      "target": "com.amazonaws.licensemanager#BoxInteger",
      "traits": {
        "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
      }
    },
    "NextToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    },
    "Filters": {
      "target": "com.amazonaws.licensemanager#Filters",
      "traits": {
        "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical operators\n      are supported:</p>\n      <ul>\n        <li>\n          <p>\n            <code>resourceArn</code> - The ARN of the license configuration resource.\n              Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n          </li>\n          <li>\n            <p>\n              <code>resourceType</code> - The resource type\n                (<code>EC2_INSTANCE</code> | <code>EC2_HOST</code> | <code>EC2_AMI</code> | \n                <code>SYSTEMS_MANAGER_MANAGED_INSTANCE</code>). \n              Logical operators are\n                <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n          <li>\n            <p>\n              <code>resourceAccount</code> - The ID of the account that owns the resource. \n            Logical operators\n            are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n          </li>\n        </ul>"
      }
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse": {
  "type": "structure",
  "members": {

"LicenseConfigurationUsageList": {
  "target": "com.amazonaws.licensemanager#LicenseConfigurationUsageList",
  "traits": {
    "smithy.api#documentation": "<p>Information about the license configurations.</p>"
  }
},
"NextToken": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
  }
}
}
}

```

```

    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#Location": {
    "type": "string"
  },
  "com.amazonaws.licensemanager#Long": {
    "type": "long"
  },
  "com.amazonaws.licensemanager#ManagedResourceSummary": {
    "type": "structure",
    "members": {
      "ResourceType":
    {
      "target": "com.amazonaws.licensemanager#ResourceType",
      "traits": {
        "smithy.api#documentation": "<p>Type of resource associated with a license.</p>"
      }
    },
    "AssociationCount": {
      "target": "com.amazonaws.licensemanager#BoxLong",
      "traits": {
        "smithy.api#documentation": "<p>Number of resources associated with licenses.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Summary information about a managed resource.</p>"
  }
},
"com.amazonaws.licensemanager#ManagedResourceSummaryList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#ManagedResourceSummary"
  }
},
"com.amazonaws.licensemanager#MaxSize100": {
  "type": "integer",
  "traits": {
    "smithy.api#range": {
      "min": 1,
      "max": 100
    }
  }
},

```

```

"com.amazonaws.licensemanager#MaxSize3StringList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#String"
  },
  "traits": {
    "smithy.api#length": {
      "min": 0,
      "max": 3
    }
  }
},
"com.amazonaws.licensemanager#Message": {
  "type": "string"
},
"com.amazonaws.licensemanager#Metadata": {
  "type": "structure",
  "members": {
    "Name": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>The key name.</p>"
      }
    },
  },
  "Value": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>The value.</p>"
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Describes key/value pairs.</p>"
  }
},
"com.amazonaws.licensemanager#MetadataList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#Metadata"
  }
},
"com.amazonaws.licensemanager#NoEntitlementsAllowedException": {
  "type": "structure",
  "members": {
    "Message": {
      "target": "com.amazonaws.licensemanager#Message"
    }
  }
}

```

```

    },
    "traits": {
      "smithy.api#documentation": "<p>There are no entitlements found for this license, or the entitlement
maximum count is reached.</p>",
      "smithy.api#error": "client",
      "smithy.api#httpError": 400
    }
  },
  "com.amazonaws.licensemanager#Options": {
    "type": "structure",
    "members": {
      "ActivationOverrideBehavior": {
        "target": "com.amazonaws.licensemanager#ActivationOverrideBehavior",
        "traits": {
          "smithy.api#documentation": "<p>An activation option for your grant that determines the behavior of
activating a grant.\n      Activation options can only be used with granted licenses sourced from the Amazon Web
Services Marketplace. Additionally, the operation must specify the value of <code>ACTIVE</code> for the\n
<code>Status</code> parameter.</p>\n      <ul>\n        <li>\n          <p>As a license administrator, you can
optionally specify an\n          <code>ActivationOverrideBehavior</code> when activating a grant.</p>\n
</li>\n        <li>\n          <p>As a grantor, you can optionally specify an\n
<code>ActivationOverrideBehavior</code> when you activate a grant for a grantee\n          account in your
organization.</p>\n        </li>\n        <li>\n          <p>As a grantee, if the grantor creating the distributed
grant doesnt specify an\n          <code>ActivationOverrideBehavior</code>, you can optionally specify one
when you\n          are activating the grant.</p>\n        </li>\n      </ul>\n      <dl>\n
<dt>DISTRIBUTED_GRANTS_ONLY</dt>\n        <dd>\n          <p>Use this value to activate a grant
without replacing any member accounts\n          active grants for the same product.</p>\n        </dd>\n
<dt>ALL_GRANTS_PERMITTED_BY_ISSUER</dt>\n        <dd>\n          <p>Use this value to activate a
grant and disable other active grants in any\n          member accounts
for the same product. This action will also replace their\n          previously activated grants with this activated
grant.</p>\n        </dd>\n      </dl>"
        }
      }
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>The options you can specify when you create a new version of a grant,
such as activation\n      override behavior. For more information, see <a
href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-licenses.html\">Granted licenses in
License Manager</a> in the <i>License Manager User Guide</i>.</p>"
  }
},
"com.amazonaws.licensemanager#OrganizationConfiguration": {
  "type": "structure",
  "members": {
    "EnableIntegration": {
      "target": "com.amazonaws.licensemanager#Boolean",
      "traits": {
        "smithy.api#default": false,
        "smithy.api#documentation":

```



```

"<p>Enables Organizations integration.</p>",
  "smithy.api#required": {}
}
},
"traits": {
  "smithy.api#documentation": "<p>Configuration information for Organizations.</p>"
}
},
"com.amazonaws.licensemanager#PrincipalArnList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#Arn"
  },
  "traits": {
    "smithy.api#length": {
      "min": 1,
      "max": 1
    }
  }
},
"com.amazonaws.licensemanager#ProductInformation": {
  "type": "structure",
  "members": {
    "ResourceType": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Resource type. The
possible values are <code>SSM_MANAGED</code> | <code>RDS</code>.</p>",
        "smithy.api#required": {}
      }
    },
    "ProductInformationFilterList": {
      "target": "com.amazonaws.licensemanager#ProductInformationFilterList",
      "traits": {
        "smithy.api#documentation": "<p>A Product information filter consists of a
<code>ProductInformationFilterComparator</code> which is a logical operator, a
<code>ProductInformationFilterName</code> which specifies the type of filter being declared, and a
<code>ProductInformationFilterValue</code> that specifies the value to filter on. </p>\n    <p>Accepted values
for <code>ProductInformationFilterName</code> are listed here along with descriptions and valid options for
<code>ProductInformationFilterComparator</code>. </p>\n    <p>The following filters and are supported when
the resource type \n    is <code>SSM_MANAGED</code>:</p>\n
    <ul>\n      <li>\n        <p>\n          <code>Application Name</code> - The name of the
application.\n          Logical operator is <code>EQUALS</code>.</p>\n      </li>\n      <li>\n        <p>\n          <code>Application Publisher</code> - The publisher of the application.\n          Logical
operator is <code>EQUALS</code>.</p>\n      </li>\n      <li>\n        <p>\n          <code>Application Version</code> - The version of the application.\n          Logical operator is
<code>EQUALS</code>.</p>\n      </li>\n      <li>\n        <p>\n          <code>Platform

```

Name - The name of the platform. Logical operator is `EQUALS`.

`Platform Type` - The platform type. Logical operator is `EQUALS`.

`Tag:key` - The key of a tag attached to an Amazon Web Services resource you wish to exclude from automated discovery. Logical operator is `NOT_EQUALS`. The key for your tag must be appended to `Tag:` following the example: `Tag:name-of-your-key`. `ProductInformationFilterValue` is optional if you are not using values for the key.

`AccountId` - The 12-digit ID of an Amazon Web Services account you wish to exclude from automated discovery. Logical operator is `NOT_EQUALS`.

`License Included` - The type of license included. Logical operators are `EQUALS` and `NOT_EQUALS`. Possible values are: `sql-server-enterprise` | `sql-server-standard` | `sql-server-web` | `windows-server-datacenter`.

The following filters and logical operators are supported when the resource type is `RDS`:

- `Engine Edition` - The edition of the database engine. Logical operator is `EQUALS`. Possible values are: `oracle-ee` | `oracle-se` | `oracle-se1` | `oracle-se2`.
- `License Pack` - The license pack. Logical operator is `EQUALS`. Possible values are: `data guard` | `diagnostic pack sqlt` | `tuning pack sqlt` | `ols` | `olap`.

```

    "smithy.api#required": {}
  },
  "traits": {
    "smithy.api#documentation": "<p>Describes product information for a license configuration.</p>"
  },
  "com.amazonaws.licensemanager#ProductInformationFilter": {
    "type": "structure",
    "members": {
      "ProductInformationFilterName": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Filter name.</p>",
          "smithy.api#required": {}
        }
      },
      "ProductInformationFilterValue": {
        "target": "com.amazonaws.licensemanager#StringList",
        "traits": {
          "smithy.api#documentation": "<p>Filter value.</p>"
        }
      }
    }
  },

```

```

"ProductInformationFilterComparator": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Logical operator.</p>",
    "smithy.api#required": {}
  }
},
"traits": {
  "smithy.api#documentation": "<p>Describes product information filters.</p>"
},
"com.amazonaws.licensemanager#ProductInformationFilterList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#ProductInformationFilter"
  }
},
"com.amazonaws.licensemanager#ProductInformationList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#ProductInformation"
  }
},
"com.amazonaws.licensemanager#ProvisionalConfiguration": {
  "type": "structure",
  "members": {
    "MaxTimeToLiveInMinutes": {
      "target": "com.amazonaws.licensemanager#BoxInteger",
      "traits": {
        "smithy.api#documentation": "<p>Maximum time for the provisional configuration, in minutes.</p>",
        "smithy.api#required": {}
      }
    }
  }
},
"traits": {
  "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
},
"com.amazonaws.licensemanager#RateLimitExceededException": {
  "type": "structure",
  "members": {
    "Message": {
      "target": "com.amazonaws.licensemanager#Message"
    }
  }
},
"traits": {

```

```

    "aws.protocols#awsQueryError": {
      "code": "RateLimitExceeded",
      "httpResponseCode": 429
    },
    "smithy.api#documentation": "<p>Too many requests have been submitted. Try again after a brief
wait.</p>",
    "smithy.api#error": "client",
    "smithy.api#httpError": 429
  }
},
"com.amazonaws.licensemanager#ReceivedMetadata": {
  "type": "structure",
  "members": {
    "ReceivedStatus": {
      "target": "com.amazonaws.licensemanager#ReceivedStatus",
      "traits": {
        "smithy.api#documentation": "<p>Received status.</p>"
      }
    },
    "ReceivedStatusReason": {
      "target": "com.amazonaws.licensemanager#StatusReasonMessage",
      "traits": {
        "smithy.api#documentation": "<p>Received
status reason.</p>"
      }
    }
  },
  "AllowedOperations": {
    "target": "com.amazonaws.licensemanager#AllowedOperationList",
    "traits": {
      "smithy.api#documentation": "<p>Allowed operations.</p>"
    }
  }
},
"traits": {
  "smithy.api#documentation": "<p>Metadata associated with received licenses and grants.</p>"
}
},
"com.amazonaws.licensemanager#ReceivedStatus": {
  "type": "enum",
  "members": {
    "PENDING_WORKFLOW": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "PENDING_WORKFLOW"
      }
    },
    "PENDING_ACCEPT": {
      "target": "smithy.api#Unit",

```

```

    "traits": {
      "smithy.api#enumValue":
"PENDING_ACCEPT"
    }
  },
  "REJECTED": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "REJECTED"
    }
  },
  "ACTIVE": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "ACTIVE"
    }
  },
  "FAILED_WORKFLOW": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "FAILED_WORKFLOW"
    }
  },
  "DELETED": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "DELETED"
    }
  },
  "DISABLED": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "DISABLED"
    }
  },
  "WORKFLOW_COMPLETED": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "WORKFLOW_COMPLETED"
    }
  }
},
"com.amazonaws.licensemanager#RedirectException": {
  "type": "structure",
  "members": {
    "Location": {
      "target": "com.amazonaws.licensemanager#Location",

```

```

    "traits": {
      "smithy.api#httpHeader": "Location"
    }
  },
  "Message": {
    "target": "com.amazonaws.licensemanager#Message"
  }
},
"traits": {
  "smithy.api#documentation": "<p>This is not the correct Region for the resource. Try again.</p>",
  "smithy.api#error": "client",
  "smithy.api#httpError": 308
}
},
"com.amazonaws.licensemanager#RejectGrant": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#RejectGrantRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#RejectGrantResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target":
"com.amazonaws.licensemanager#ResourceLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ]
},
"traits": {
  "smithy.api#documentation": "<p>Rejects the specified grant.</p>"
}

```

```

    }
  },
  "com.amazonaws.licensemanager#RejectGrantRequest": {
    "type": "structure",
    "members": {
      "GrantArn": {
        "target": "com.amazonaws.licensemanager#Arn",
        "traits": {
          "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
          "smithy.api#required": {}
        }
      }
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
}
},
"com.amazonaws.licensemanager#RejectGrantResponse": {
  "type": "structure",
  "members": {
    "GrantArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>Grant ARN.</p>"
      }
    },
    "Status": {
      "target": "com.amazonaws.licensemanager#GrantStatus",
      "traits": {
        "smithy.api#documentation": "<p>Grant status.</p>"
      }
    },
    "Version": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Grant version.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#RenewType":
{
  "type": "enum",
  "members": {

```

```

    "NONE": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "None"
      }
    },
    "WEEKLY": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Weekly"
      }
    },
    "MONTHLY": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Monthly"
      }
    }
  },
  "com.amazonaws.licensemanager#ReportContext": {
    "type": "structure",
    "members": {
      "licenseConfigurationArns": {
        "target": "com.amazonaws.licensemanager#ArnList",
        "traits": {
          "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration that this generator reports on.</p>",
          "smithy.api#required": {}
        }
      }
    },
    "traits": {
      "smithy.api#documentation": "<p>Details of the license configuration that this generator reports on.</p>"
    }
  },
  "com.amazonaws.licensemanager#ReportFrequency": {
    "type": "structure",
    "members": {
      "value": {
        "target": "com.amazonaws.licensemanager#Integer",
        "traits": {
          "smithy.api#documentation": "<p>Number of times within the frequency period that a report is generated. \n      The only supported value is <code>1</code>.</p>"
        }
      }
    },
    "period": {

```



```

    "target": "com.amazonaws.licensemanager#ReportFrequencyType",

    "traits": {
      "smithy.api#documentation": "<p>Time period between each report. The period can be daily, weekly,
or monthly.</p>"
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Details about how frequently reports are generated.</p>"
  }
},
"com.amazonaws.licensemanager#ReportFrequencyType": {
  "type": "enum",
  "members": {
    "DAY": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "DAY"
      }
    },
    "WEEK": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "WEEK"
      }
    },
    "MONTH": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "MONTH"
      }
    }
  }
},
"com.amazonaws.licensemanager#ReportGenerator": {
  "type": "structure",
  "members": {
    "ReportGeneratorName": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Name of the report generator.</p>"
      }
    },
    "ReportType": {
      "target": "com.amazonaws.licensemanager#ReportTypeList",
      "traits": {

```

```

        "smithy.api#documentation": "<p>Type of reports that are generated.</p>"
    }
},
"ReportContext": {
    "target": "com.amazonaws.licensemanager#ReportContext",
    "traits": {
        "smithy.api#documentation": "<p>License
configuration type for this generator.</p>"
    }
},
"ReportFrequency": {
    "target": "com.amazonaws.licensemanager#ReportFrequency",
    "traits": {
        "smithy.api#documentation": "<p>Details about how frequently reports are generated.</p>"
    }
},
"LicenseManagerReportGeneratorArn": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator.</p>"
    }
},
"LastRunStatus": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
        "smithy.api#documentation": "<p>Status of the last report generation attempt.</p>"
    }
},
"LastRunFailureReason":
{
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
        "smithy.api#documentation": "<p>Failure message for the last report generation attempt.</p>"
    }
},
"LastReportGenerationTime": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
        "smithy.api#documentation": "<p>Time the last report was generated at.</p>"
    }
},
"ReportCreatorAccount": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
        "smithy.api#documentation": "<p>The Amazon Web Services account ID used to create the report
generator.</p>"
    }
},

```

```

    "Description": {
      "target": "com.amazonaws.licensemanager#String",

"traits": {
  "smithy.api#documentation": "<p>Description of the report generator.</p>"
  },
  },
  "S3Location": {
    "target": "com.amazonaws.licensemanager#S3Location",
    "traits": {
      "smithy.api#documentation": "<p>Details of the S3 bucket that report generator reports are published
to.</p>"
    }
  },
  "CreateTime": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Time the report was created.</p>"
    }
  },
  "Tags": {
    "target": "com.amazonaws.licensemanager#TagList",
    "traits": {
      "smithy.api#documentation": "<p>Tags associated with the report generator.</p>"
    }
  }
}
},
"traits": {
  "smithy.api#documentation": "<p>Describe the details of a report generator.</p>"
}
},
"com.amazonaws.licensemanager#ReportGeneratorList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#ReportGenerator"
  }
},
"com.amazonaws.licensemanager#ReportGeneratorName": {
  "type": "string",
  "traits": {
    "smithy.api#length": {
      "min": 1,
      "max": 100
    }
  }
},
"com.amazonaws.licensemanager#ReportType": {

```

```

    "type": "enum",
    "members": {
      "LICENSE_CONFIGURATION_SUMMARY_REPORT": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "LicenseConfigurationSummaryReport"
        }
      }
    },
    "LICENSE_CONFIGURATION_USAGE_REPORT": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "LicenseConfigurationUsageReport"
      }
    }
  },
  "com.amazonaws.licensemanager#ReportTypeList": {
    "type": "list",
    "member": {
      "target": "com.amazonaws.licensemanager#ReportType"
    }
  },
  "com.amazonaws.licensemanager#ResourceInventory": {
    "type": "structure",
    "members": {
      "ResourceId": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>ID of the resource.</p>"
        }
      },
      "ResourceType": {
        "target": "com.amazonaws.licensemanager#ResourceType",
        "traits": {
          "smithy.api#documentation": "<p>Type of resource.</p>"
        }
      },
      "ResourceArn": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
        }
      },
      "Platform": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {

```

```

        "smithy.api#documentation": "<p>Platform of the resource.</p>"
    }
},
"PlatformVersion": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
        "smithy.api#documentation": "<p>Platform version of the resource in the inventory.</p>"
    }
},
"ResourceOwningAccountId":
{
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
        "smithy.api#documentation": "<p>ID of the account that owns the resource.</p>"
    }
}
},
"traits": {
    "smithy.api#documentation": "<p>Details about a resource.</p>"
}
},
"com.amazonaws.licensemanager#ResourceInventoryList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ResourceInventory"
    }
},
"com.amazonaws.licensemanager#ResourceLimitExceededException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    }
},
"traits": {
    "aws.protocols#awsQueryError": {
        "code": "ResourceLimitExceeded",

        "httpResponseCode": 400
    },
    "smithy.api#documentation": "<p>Your resource limits have been exceeded.</p>",
    "smithy.api#error": "client",
    "smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#ResourceNotFoundException": {
    "type": "structure",
    "members": {

```

```

    "Message": {
      "target": "com.amazonaws.licensemanager#Message"
    }
  },
  "traits": {
    "aws.protocols#awsQueryError": {
      "code": "InvalidResource.NotFound",
      "httpResponseCode": 400
    },
    "smithy.api#documentation": "<p>The resource cannot be found.</p>",
    "smithy.api#error": "client",
    "smithy.api#httpError": 400
  }
},
"com.amazonaws.licensemanager#ResourceType": {
  "type": "enum",
  "members": {
    "EC2_INSTANCE": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "EC2_INSTANCE"
      }
    },
    "EC2_HOST": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "EC2_HOST"
      }
    },
    "EC2_AMI": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "EC2_AMI"
      }
    },
    "RDS": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "RDS"
      }
    },
    "SYSTEMS_MANAGER_MANAGED_INSTANCE": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "SYSTEMS_MANAGER_MANAGED_INSTANCE"
      }
    }
  }
}

```

```

    },
    "com.amazonaws.licensemanager#S3Location": {
      "type": "structure",
      "members": {
        "bucket": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Name of the S3 bucket reports are published to.</p>"
          }
        },
        "keyPrefix": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Prefix of the S3 bucket reports are published to.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Details of the S3 bucket that report generator reports are published to.</p>"
      }
    },
    "com.amazonaws.licensemanager#ServerInternalException": {
      "type": "structure",
      "members": {
        "Message": {
          "target": "com.amazonaws.licensemanager#Message"
        }
      },
      "traits": {
        "aws.protocols#awsQueryError": {
          "code": "InternalServerError",
          "httpResponseCode": 500
        },
        "smithy.api#documentation": "<p>The server experienced an internal error. Try again.</p>",
        "smithy.api#error": "server",
        "smithy.api#httpError": 500
      }
    },
    "com.amazonaws.licensemanager#SignedToken": {
      "type": "string",
      "traits": {
        "smithy.api#length": {
          "min": 4096
        }
      }
    },
    "com.amazonaws.licensemanager#StatusReasonMessage": {

```

```

    "type": "string",
    "traits":
  {
    "smithy.api#length": {
      "min": 0,
      "max": 400
    },
    "smithy.api#pattern": "^[\\s\\S]+$"
  }
},
"com.amazonaws.licensemanager#String": {
  "type": "string"
},
"com.amazonaws.licensemanager#StringList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#String"
  }
},
"com.amazonaws.licensemanager#Tag": {
  "type": "structure",
  "members": {
    "Key": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Tag key.</p>"
      }
    },
    "Value": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation":
"<p>Tag value.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Details about a tag for a license configuration.</p>"
  }
},
"com.amazonaws.licensemanager#TagKeyList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#String"
  }
},
"com.amazonaws.licensemanager#TagList": {
  "type": "list",

```



```

    "member": {
      "target": "com.amazonaws.licensemanager#Tag"
    }
  },
  "com.amazonaws.licensemanager#TagResource": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#TagResourceRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#TagResourceResponse"
    },
    "errors": [
      {
        "target":
"com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
      }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Adds the specified tags to the specified license configuration.</p>"
    }
  },
  "com.amazonaws.licensemanager#TagResourceRequest": {
    "type": "structure",
    "members": {
      "ResourceArn": {
        "target": "com.amazonaws.licensemanager#String",
        "traits":
{
          "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
          "smithy.api#required": {}
        }
      },
      "Tags": {
        "target": "com.amazonaws.licensemanager#TagList",

```

```

    "traits": {
      "smithy.api#documentation": "<p>One or more tags.</p>",
      "smithy.api#required": {}
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#TagResourceResponse": {
  "type": "structure",
  "members": {},
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#TokenData": {
  "type": "structure",
  "members": {
    "TokenId": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Token ID.</p>"
      }
    },
    "TokenType": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Type of token generated. The supported value is
<code>REFRESH_TOKEN</code>.</p>"
      }
    },
    "LicenseArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
      }
    },
    "ExpirationTime": {
      "target": "com.amazonaws.licensemanager#ISO8601DateTime",
      "traits": {
        "smithy.api#documentation": "<p>Token expiration time, in ISO8601-UTC
format.</p>"
      }
    },
    "TokenProperties": {
      "target": "com.amazonaws.licensemanager#MaxSize3StringList",

```

```

    "traits": {
      "smithy.api#documentation": "<p>Data specified by the caller.</p>"
    }
  },
  "RoleArns": {
    "target": "com.amazonaws.licensemanager#ArnList",
    "traits": {
      "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the roles included in the
token.</p>"
    }
  },
  "Status": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Token status. The possible values are
<code>AVAILABLE</code> and <code>DELETED</code>.</p>"
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Describes a token.</p>"
  }
},
"com.amazonaws.licensemanager#TokenList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#TokenData"
  }
},
"com.amazonaws.licensemanager#TokenString": {
  "type": "string",
  "traits": {
    "smithy.api#length": {
      "min": 0,
      "max": 4096
    },
    "smithy.api#pattern": "^\\S+$"
  }
},
"com.amazonaws.licensemanager#TokenType": {
  "type": "enum",
  "members": {
    "REFRESH_TOKEN": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "REFRESH_TOKEN"
      }
    }
  }
}

```

```

    }
  },
  "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException":
  {
    "type": "structure",
    "members": {
      "Message": {
        "target": "com.amazonaws.licensemanager#Message"
      }
    },
    "traits": {
      "smithy.api#documentation": "<p>The digital signature method is unsupported. Try your request
again.</p>",
      "smithy.api#error": "client",
      "smithy.api#httpError": 400
    }
  },
  "com.amazonaws.licensemanager#UntagResource": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#UntagResourceRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#UntagResourceResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
      }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Removes the specified tags from the specified license
configuration.</p>"
    }
  },

```

```

"com.amazonaws.licensemanager#UntagResourceRequest": {
  "type": "structure",
  "members": {
    "ResourceArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
        "smithy.api#required": {}
      }
    },
    "TagKeys": {
      "target": "com.amazonaws.licensemanager#TagKeyList",
      "traits": {
        "smithy.api#documentation": "<p>Keys identifying the tags to remove.</p>",
        "smithy.api#required": {}
      }
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#UntagResourceResponse": {
  "type": "structure",
  "members": {},
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#UpdateLicenseConfiguration": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    }
  ]
}

```

```

    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Modifies the attributes of an existing license configuration.</p>"
  }
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest": {
  "type": "structure",
  "members": {
    "LicenseConfigurationArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>",
        "smithy.api#required": {}
      }
    },
    "LicenseConfigurationStatus": {
      "target": "com.amazonaws.licensemanager#LicenseConfigurationStatus",
      "traits": {
        "smithy.api#documentation": "<p>New status of the license configuration.</p>"
      }
    },
    "LicenseRules": {
      "target": "com.amazonaws.licensemanager#StringList",
      "traits": {
        "smithy.api#documentation": "<p>New license rule. The only rule that you can add after you create a license\n configuration is licenseAffinityToHost.</p>"
      }
    },
    "LicenseCount": {
      "target": "com.amazonaws.licensemanager#BoxLong",
      "traits": {
        "smithy.api#documentation": "<p>New number of licenses managed by the license configuration.</p>"
      }
    },
    "LicenseCountHardLimit": {

```

```

        "target": "com.amazonaws.licensemanager#BoxBoolean",
        "traits": {
            "smithy.api#documentation": "<p>New hard limit of the number of available licenses.</p>"
        }
    },
    "Name": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
            "smithy.api#documentation": "<p>New name
of the license configuration.</p>"
        }
    },
    "Description": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
            "smithy.api#documentation": "<p>New description of the license configuration.</p>"
        }
    },
    "ProductInformationList": {
        "target": "com.amazonaws.licensemanager#ProductInformationList",
        "traits": {
            "smithy.api#documentation": "<p>New product information.</p>"
        }
    },
    "DisassociateWhenNotFound": {
        "target": "com.amazonaws.licensemanager#BoxBoolean",
        "traits": {
            "smithy.api#documentation": "<p>When true, disassociates a resource when software is
uninstalled.</p>"
        }
    }
},
"traits":
{
    "smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse": {
    "type": "structure",
    "members": {},
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest"
    }
}

```

```

    },
    "output": {
      "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
      },
      {
        "target": "com.amazonaws.licensemanager#ValidationException"
      }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Updates a report generator.</p>\n      <p>After you make changes to a report generator, it starts generating new reports within 60 minutes of being updated.</p>"
    },
    "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest":
    {
      "type": "structure",
      "members": {
        "LicenseManagerReportGeneratorArn": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator to update.</p>",
            "smithy.api#required": {}
          }
        },
        "ReportGeneratorName": {

```



```

    "target": "com.amazonaws.licensemanager#ReportGeneratorName",
    "traits": {
      "smithy.api#documentation": "<p>Name of the report generator.</p>",
      "smithy.api#required": {}
    }
  },
  "Type": {
    "target": "com.amazonaws.licensemanager#ReportTypeList",
    "traits": {
      "smithy.api#documentation":
        "<p>Type of reports to generate. The following report types are supported:</p>\n
        <ul>\n
        <li>\n
        <p>License configuration report - Reports the number and details of consumed licenses for a license
        configuration.</p>\n
        </li>\n
        <li>\n
        <p>Resource report - Reports the tracked licenses and
        resource consumption for a license configuration.</p>\n
        </li>\n
        </ul>",
      "smithy.api#required": {}
    }
  },
  "ReportContext": {
    "target": "com.amazonaws.licensemanager#ReportContext",
    "traits": {
      "smithy.api#documentation": "<p>The report context.</p>",
      "smithy.api#required": {}
    }
  },
  "ReportFrequency": {
    "target": "com.amazonaws.licensemanager#ReportFrequency",
    "traits": {
      "smithy.api#documentation": "<p>Frequency by which reports are generated.</p>",
      "smithy.api#required": {}
    }
  },
  "ClientToken": {
    "target": "com.amazonaws.licensemanager#ClientRequestToken",
    "traits": {
      "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
      idempotency of the request.</p>",
      "smithy.api#required": {}
    }
  },
  "Description": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Description of the report generator.</p>"
    }
  }
},
"traits": {

```

```

    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse":
{
  "type": "structure",
  "members": {},
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidResourceStateException"
    },
    {
      "target": "com.amazonaws.licensemanager#LicenseUsageException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Adds or removes the specified license configurations for the specified Amazon Web Services resource.</p>\n    <p>You can update the license specifications of AMIs, instances, and hosts.\n    You cannot update the license specifications for launch templates and CloudFormation templates, \n    as they send license configurations to the operation that creates the resource.</p>"
  }
}

```

```

    }
  },
  "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest": {
    "type": "structure",
    "members": {
      "ResourceArn": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon Web Services
resource.</p>",
          "smithy.api#required": {}
        }
      },
      "AddLicenseSpecifications": {
        "target": "com.amazonaws.licensemanager#LicenseSpecifications",
        "traits": {
          "smithy.api#documentation": "<p>ARNs of the license configurations to add.</p>"
        }
      },
      "RemoveLicenseSpecifications": {
        "target": "com.amazonaws.licensemanager#LicenseSpecifications",
        "traits": {
          "smithy.api#documentation":
"<p>ARNs of the license configurations to remove.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#input": {}
    }
  },
  "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse": {
    "type": "structure",
    "members": {},
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#UpdateServiceSettings": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#UpdateServiceSettingsRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#UpdateServiceSettingsResponse"
    },
    "errors": [

```

```

    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Updates License Manager settings for the current Region.</p>"
  }
},
"com.amazonaws.licensemanager#UpdateServiceSettingsRequest": {
  "type": "structure",
  "members": {
    "S3BucketArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon S3 bucket where
the License
Manager information is stored.</p>"
      }
    },
    "SnsTopicArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon SNS topic used
for License Manager alerts.</p>"
      }
    },
    "OrganizationConfiguration": {
      "target": "com.amazonaws.licensemanager#OrganizationConfiguration",
      "traits": {
        "smithy.api#documentation": "<p>Enables integration with Organizations for cross-account
discovery.</p>"
      }
    },
    "EnableCrossAccountsDiscovery": {
      "target": "com.amazonaws.licensemanager#BoxBoolean",
      "traits": {

```

```

    "smithy.api#documentation": "<p>Activates cross-account discovery.</p>"
  }
},
"traits": {
  "smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateServiceSettingsResponse": {
  "type": "structure",
  "members": {},
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#UsageOperation": {
  "type": "string",
  "traits": {
    "smithy.api#length": {
      "min": 0,
      "max": 50
    }
  }
},
"com.amazonaws.licensemanager#ValidationException": {
  "type": "structure",
  "members": {
    "Message": {
      "target": "com.amazonaws.licensemanager#Message"
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",

    "smithy.api#error": "client",
    "smithy.api#httpError": 400
  }
}
}
}

```

## 1.330 aws-aws-sdk-go 1.30.3

## 1.330.1 Available under license :

```
{
  "version": "2.0",
  "service": "<p>With License Manager, you can create user-based subscriptions to utilize licensed software with a per user subscription fee on Amazon EC2 instances.</p>",
  "operations": {
    "AssociateUser": "<p>Associates the user to an EC2 instance to utilize user-based subscriptions.</p> <note><p>Your estimated bill for charges on the number of users and related costs will take 48 hours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing status) in Amazon Web Services Billing. For more information, see <a href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your monthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p> </note>",
    "DeregisterIdentityProvider": "<p>Deregisters the identity provider from providing user-based subscriptions.</p>",
    "DisassociateUser": "<p>Disassociates the user from an EC2 instance providing user-based subscriptions.</p>",
    "ListIdentityProviders":
      "<p>Lists the identity providers for user-based subscriptions.</p>",
    "ListInstances": "<p>Lists the EC2 instances providing user-based subscriptions.</p>",
    "ListProductSubscriptions": "<p>Lists the user-based subscription products available from an identity provider.</p>",
    "ListUserAssociations": "<p>Lists user associations for an identity provider.</p>",
    "RegisterIdentityProvider": "<p>Registers an identity provider for user-based subscriptions.</p>",
    "StartProductSubscription": "<p>Starts a product subscription for a user with the specified identity provider.</p> <note><p>Your estimated bill for charges on the number of users and related costs will take 48 hours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing status) in Amazon Web Services Billing. For more information, see <a href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your monthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p> </note>",
    "StopProductSubscription": "<p>Stops a product subscription for a user with the specified identity provider.</p>",
    "UpdateIdentityProviderSettings": "<p>Updates additional product configuration settings for the registered identity provider.</p>"
  },
  "shapes": {
    "AccessDeniedException": {
      "base": "<p>You don't have sufficient access to perform this action.</p>",
      "refs": {
      }
    },
    "ActiveDirectoryIdentityProvider": {
      "base": "<p>Details about an Active Directory identity provider.</p>",
      "refs": {
        "IdentityProvider$ActiveDirectoryIdentityProvider": "<p>An object that details an Active Directory identity provider.</p>"
      }
    }
  },
  "AssociateUserRequest": {
    "base": null,
    "refs": {
  }
```

```

    }
  },
  "AssociateUserResponse": {
    "base": null,
    "refs": {
    }
  },
  "BoxInteger": {
    "base": null,
    "refs": {
      "ListIdentityProvidersRequest$MaxResults":
        "<p>Maximum number of results to return in a single call.</p>",
      "ListInstancesRequest$MaxResults": "<p>Maximum number of results to return in a single call.</p>",
      "ListProductSubscriptionsRequest$MaxResults": "<p>Maximum number of results to return in a single
        call.</p>",
      "ListUserAssociationsRequest$MaxResults": "<p>Maximum number of results to return in a single call.</p>"
    }
  },
  "ConflictException": {
    "base": "<p>The request couldn't be completed because it conflicted with the current state of the resource.</p>",
    "refs": {
    }
  },
  "DeregisterIdentityProviderRequest": {
    "base": null,
    "refs": {
    }
  },
  "DeregisterIdentityProviderResponse": {
    "base": null,
    "refs": {
    }
  },
  "DisassociateUserRequest": {
    "base": null,
    "refs": {
    }
  },
  "DisassociateUserResponse": {
    "base": null,
    "refs": {
    }
  },
  "Filter": {
    "base": "<p>A
    filter name and value pair that is used to return more specific results from a describe operation. Filters can be used
    to match a set of resources by specific criteria, such as tags, attributes, or IDs.</p>",
    "refs": {
  
```

```

    "FilterList$member": null
  }
},
"FilterList": {
  "base": null,
  "refs": {
    "ListInstancesRequest$Filters": "<p>An array of structures that you can use to filter the results to those that match one or more sets of key-value pairs that you specify.</p>",
    "ListProductSubscriptionsRequest$Filters": "<p>An array of structures that you can use to filter the results to those that match one or more sets of key-value pairs that you specify.</p>",
    "ListUserAssociationsRequest$Filters": "<p>An array of structures that you can use to filter the results to those that match one or more sets of key-value pairs that you specify.</p>"
  }
},
"IdentityProvider": {
  "base": "<p>Details about an identity provider.</p>",
  "refs": {
    "AssociateUserRequest$IdentityProvider": "<p>The identity provider of the user.</p>",
    "DeregisterIdentityProviderRequest$IdentityProvider": "<p>An object that specifies details for the identity provider.</p>",
    "DisassociateUserRequest$IdentityProvider": "<p>An object that specifies details for the identity provider.</p>",
    "IdentityProviderSummary$IdentityProvider": "<p>An object that specifies details for the identity provider.</p>",
    "InstanceUserSummary$IdentityProvider": "<p>An object that specifies details for the identity provider.</p>",
    "ListProductSubscriptionsRequest$IdentityProvider": "<p>An object that specifies details for the identity provider.</p>",
    "ListUserAssociationsRequest$IdentityProvider": "<p>An object that specifies details for the identity provider.</p>",
    "ProductUserSummary$IdentityProvider": "<p>An object that specifies details for the identity provider.</p>",
    "RegisterIdentityProviderRequest$IdentityProvider":
    "<p>An object that specifies details for the identity provider.</p>",
    "StartProductSubscriptionRequest$IdentityProvider": "<p>An object that specifies details for the identity provider.</p>",
    "StopProductSubscriptionRequest$IdentityProvider": "<p>An object that specifies details for the identity provider.</p>",
    "UpdateIdentityProviderSettingsRequest$IdentityProvider": null
  }
},
"IdentityProviderSummary": {
  "base": "<p>Describes an identity provider.</p>",
  "refs": {
    "DeregisterIdentityProviderResponse$IdentityProviderSummary": "<p>Metadata that describes the results of an identity provider operation.</p>",
    "IdentityProviderSummaryList$member": null,
    "RegisterIdentityProviderResponse$IdentityProviderSummary": "<p>Metadata that describes the results of an identity provider operation.</p>",
    "UpdateIdentityProviderSettingsResponse$IdentityProviderSummary": null
  }
}

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    }
  },
  "IdentityProviderSummaryList": {
    "base": null,
    "refs": {
      "ListIdentityProvidersResponse$IdentityProviderSummaries": "<p>Metadata that describes the list identity
providers operation.</p>"
    }
  },
  "InstanceSummary": {
    "base": "<p>Describes an EC2 instance providing user-based subscriptions.</p>",
    "refs": {
      "InstanceSummaryList$member": null
    }
  },
  "InstanceSummaryList": {
    "base": null,
    "refs": {
      "ListInstancesResponse$InstanceSummaries": "<p>Metadata that describes the list instances operation.</p>"
    }
  },
  "InstanceUserSummary": {
    "base": "<p>Describes users of an EC2 instance providing user-based subscriptions.</p>",
    "refs": {
      "AssociateUserResponse$InstanceUserSummary": "<p>Metadata that describes the associate user
operation.</p>",
      "DisassociateUserResponse$InstanceUserSummary": "<p>Metadata that describes the associate user
operation.</p>",

      "InstanceUserSummaryList$member": null
    }
  },
  "InstanceUserSummaryList": {
    "base": null,
    "refs": {
      "ListUserAssociationsResponse$InstanceUserSummaries": "<p>Metadata that describes the list user association
operation.</p>"
    }
  },
  "InternalServerError": {
    "base": "<p>An exception occurred with the service.</p>",
    "refs": {
    }
  },
  "ListIdentityProvidersRequest": {
    "base": null,
    "refs": {

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    }
  },
  "ListIdentityProvidersResponse": {
    "base": null,
    "refs": {
    }
  },
  "ListInstancesRequest": {
    "base": null,
    "refs": {
    }
  },
  "ListInstancesResponse": {
    "base": null,
    "refs": {
    }
  },
  "ListProductSubscriptionsRequest": {
    "base": null,
    "refs": {
    }
  },
  "ListProductSubscriptionsResponse": {
    "base": null,
    "refs": {
    }
  },
  "ListUserAssociationsRequest": {
    "base": null,
    "refs": {
    }
  },
  "ListUserAssociationsResponse": {
    "base": null,
    "refs": {
    }
  },
  "ProductUserSummary": {
    "base": "<p>The summary of the user-based subscription products for a user.</p>",
    "refs": {
      "ProductUserSummaryList$member": null,
      "StartProductSubscriptionResponse$ProductUserSummary": "<p>Metadata that describes the start product
subscription operation.</p>",
      "StopProductSubscriptionResponse$ProductUserSummary": "<p>Metadata that describes the start product
subscription operation.</p>"
    }
  },
  "ProductUserSummaryList": {

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    "base": null,
    "refs": {
      "ListProductSubscriptionsResponse$ProductUserSummaries": "<p>Metadata that describes the list product
subscriptions operation.</p>"
    }
  },
  "RegisterIdentityProviderRequest": {
    "base": null,
    "refs": {
    }
  },
  "RegisterIdentityProviderResponse": {
    "base": null,
    "refs": {
    }
  },
  "ResourceNotFoundException":
  {
    "base": "<p>The resource couldn't be found.</p>",
    "refs": {
    }
  },
  "SecurityGroup": {
    "base": null,
    "refs": {
      "Settings$SecurityGroupId": "<p>A security group ID that allows inbound TCP port 1688 communication
between resources in your VPC and the VPC endpoint for activation servers.</p>",
      "UpdateSettings$SecurityGroupId": "<p>A security group ID that allows inbound TCP port 1688
communication between resources in your VPC and the VPC endpoints for activation servers.</p>"
    }
  },
  "ServiceQuotaExceededException": {
    "base": "<p>The request failed because a service quota is exceeded.</p>",
    "refs": {
    }
  },
  "Settings": {
    "base": "<p>The registered identity providers product related configuration settings such as the subnets to
provision VPC endpoints, and the security group ID that is associated with the VPC endpoints. The security group
should permit inbound TCP port 1688 communication
from resources in the VPC.</p>",
    "refs": {
      "IdentityProviderSummary$Settings": "<p>An object that details the registered identity providers product
related configuration settings such as the subnets to provision VPC endpoints.</p>",
      "RegisterIdentityProviderRequest$Settings": "<p>The registered identity providers product related
configuration settings such as the subnets to provision VPC endpoints.</p>"
    }
  },
}

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"SettingsSubnetsList": {
  "base": null,
  "refs": {
    "Settings$Subnets": "<p>The subnets defined for the registered identity provider.</p>"
  }
},
"StartProductSubscriptionRequest": {
  "base": null,
  "refs": {
  }
},
"StartProductSubscriptionResponse": {
  "base": null,
  "refs": {
  }
},
"StopProductSubscriptionRequest": {
  "base": null,
  "refs": {
  }
},
"StopProductSubscriptionResponse": {
  "base": null,
  "refs": {
  }
},
"String":
{
  "base": null,
  "refs": {
    "AccessDeniedException$message": null,
    "ActiveDirectoryIdentityProvider$DirectoryId": "<p>The directory ID for an Active Directory identity provider.</p>",
    "AssociateUserRequest$Domain": "<p>The domain name of the user.</p>",
    "AssociateUserRequest$InstanceId": "<p>The ID of the EC2 instance, which provides user-based subscriptions.</p>",
    "AssociateUserRequest$Username": "<p>The user name from the identity provider for the user.</p>",
    "ConflictException$message": null,
    "DeregisterIdentityProviderRequest$Product": "<p>The name of the user-based subscription product.</p>",
    "DisassociateUserRequest$Domain": "<p>The domain name of the user.</p>",
    "DisassociateUserRequest$InstanceId": "<p>The ID of the EC2 instance, which provides user-based subscriptions.</p>",
    "DisassociateUserRequest$Username": "<p>The user name from the identity provider for the user.</p>",

    "Filter$Attribute": "<p>The name of an attribute to use as a filter.</p>",
    "Filter$Operation": "<p>The type of search (For example, eq, geq, leq)</p>",
    "Filter$Value": "<p>Value of the filter.</p>",
    "IdentityProviderSummary$FailureMessage": "<p>The failure message associated with an identity

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provider.</p>",

"IdentityProviderSummary\$Product": "<p>The name of the user-based subscription product.</p>",

"IdentityProviderSummary\$Status": "<p>The status of an identity provider.</p>",

"InstanceSummary\$InstanceId": "<p>The ID of the EC2 instance, which provides user-based subscriptions.</p>",

"InstanceSummary\$LastStatusCheckDate": "<p>The date of the last status check.</p>",

"InstanceSummary\$Status": "<p>The status of an EC2 instance resource.</p>",

"InstanceSummary\$StatusMessage": "<p>The status message for an EC2 instance.</p>",

"InstanceUserSummary\$AssociationDate": "<p>The date a user was associated with an EC2 instance.</p>",

"InstanceUserSummary\$DisassociationDate": "<p>The date a user was disassociated from an EC2 instance.</p>",

"InstanceUserSummary\$Domain": "<p>The domain name of the user.</p>",

"InstanceUserSummary\$InstanceId": "<p>The ID of the EC2 instance, which provides user-based subscriptions.</p>",

"InstanceUserSummary\$Status": "<p>The status of a user associated with an EC2 instance.</p>",

"InstanceUserSummary\$StatusMessage": "<p>The status message for users of an EC2 instance.</p>",

"InstanceUserSummary\$Username": "<p>The user name from the identity provider for the user.</p>",

"InternalServerException\$message": null,

"ListIdentityProvidersRequest\$NextToken": "<p>Token for the next set of results.</p>",

"ListIdentityProvidersResponse\$NextToken": "<p>Token for the next set of results.</p>",

"ListInstancesRequest\$NextToken": "<p>Token for the next set of results.</p>",

"ListInstancesResponse\$NextToken":

<p>Token for the next set of results.</p>",

"ListProductSubscriptionsRequest\$NextToken": "<p>Token for the next set of results.</p>",

"ListProductSubscriptionsRequest\$Product": "<p>The name of the user-based subscription product.</p>",

"ListProductSubscriptionsResponse\$NextToken": "<p>Token for the next set of results.</p>",

"ListUserAssociationsRequest\$InstanceId": "<p>The ID of the EC2 instance, which provides user-based subscriptions.</p>",

"ListUserAssociationsRequest\$NextToken": "<p>Token for the next set of results.</p>",

"ListUserAssociationsResponse\$NextToken": "<p>Token for the next set of results.</p>",

"ProductUserSummary\$Domain": "<p>The domain name of the user.</p>",

"ProductUserSummary\$Product": "<p>The name of the user-based subscription product.</p>",

"ProductUserSummary\$Status": "<p>The status of a product for a user.</p>",

"ProductUserSummary\$StatusMessage": "<p>The status message for a product for a user.</p>",

"ProductUserSummary\$SubscriptionEndDate": "<p>The end date of a subscription.</p>",

"ProductUserSummary\$SubscriptionStartDate": "<p>The start date of a subscription.</p>",

"ProductUserSummary\$Username": "<p>The user name from the identity provider of the user.</p>",

"RegisterIdentityProviderRequest\$Product": "<p>The name of the user-based subscription product.</p>",

"ResourceNotFoundException\$message": null,

"ServiceQuotaExceededException\$message": null,

"StartProductSubscriptionRequest\$Domain": "<p>The domain name of the user.</p>",

"StartProductSubscriptionRequest\$Product": "<p>The name of the user-based subscription product.</p>",

"StartProductSubscriptionRequest\$Username": "<p>The user name from the identity provider of the user.</p>",

"StopProductSubscriptionRequest\$Domain": "<p>The domain name of the user.</p>",

"StopProductSubscriptionRequest\$Product":

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"<p>The name of the user-based subscription product.</p>",
  "StopProductSubscriptionRequest$Username": "<p>The user name from the identity provider for the
user.</p>",
  "StringList$member": null,
  "ThrottlingException$message": null,
  "UpdateIdentityProviderSettingsRequest$Product": "<p>The name of the user-based subscription
product.</p>",
  "ValidationException$message": null
}
},
"StringList": {
  "base": null,
  "refs": {
    "InstanceSummary$Products": "<p>A list of provided user-based subscription products.</p>"
  }
},
"Subnet": {
  "base": null,
  "refs": {
    "SettingsSubnetsList$member": null,
    "Subnets$member": null
  }
},
"Subnets": {
  "base": null,
  "refs": {
    "UpdateSettings$AddSubnets": "<p>The ID of one or more subnets in which License Manager will create a
VPC endpoint for products that require connectivity to activation servers.</p>",
    "UpdateSettings$RemoveSubnets":
"<p>The ID of one or more subnets to remove.</p>"
  }
},
"ThrottlingException": {
  "base": "<p>The request was denied because of request throttling. Retry the request.</p>",
  "refs": {
  }
},
"UpdateIdentityProviderSettingsRequest": {
  "base": null,
  "refs": {
  }
},
"UpdateIdentityProviderSettingsResponse": {
  "base": null,
  "refs": {
  }
},
"UpdateSettings": {

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"base": "<p>Updates the registered identity providers product related configuration settings such as the subnets
to provision VPC endpoints.</p>",
"refs": {
  "UpdateIdentityProviderSettingsRequest$updateSettings": "<p>Updates the registered identity providers
product related configuration settings. You can update any combination of settings in a single operation such as
the:</p> <ul> <li> <p>Subnets which you want to add to provision VPC endpoints.</p> </li> <li> <p>Subnets
which you want to remove the VPC endpoints
from.</p> </li> <li> <p>Security group ID which permits traffic to the VPC endpoints.</p> </li> </ul>"
}
},
"ValidationException": {
  "base": "<p>A parameter is not valid.</p>",
  "refs": {
  }
}
}
}
{
  "version": "2.0",
  "service": "<p>With License Manager, you can discover and track your commercial Linux subscriptions on running
Amazon EC2 instances.</p>",
  "operations": {
    "DeregisterSubscriptionProvider": "<p>Remove a third-party subscription provider from the Bring Your Own
License (BYOL) subscriptions registered to your account.</p>",
    "GetRegisteredSubscriptionProvider": "<p>Get details for a Bring Your Own License (BYOL) subscription that's
registered to your account.</p>",
    "GetServiceSettings": "<p>Lists the Linux subscriptions service settings for your account.</p>",
    "ListLinuxSubscriptionInstances": "<p>Lists the running Amazon EC2 instances that were discovered with
commercial Linux subscriptions.</p>",
    "ListLinuxSubscriptions": "<p>Lists the Linux subscriptions that have been discovered. If you have linked your
organization, the returned results will include data aggregated across your accounts in Organizations.</p>",
    "ListRegisteredSubscriptionProviders":
    "<p>List Bring Your Own License (BYOL) subscription registration resources for your account.</p>",
    "ListTagsForResource": "<p>List the metadata tags that are assigned to the specified Amazon Web Services
resource.</p>",
    "RegisterSubscriptionProvider": "<p>Register the supported third-party subscription provider for your Bring Your
Own License (BYOL) subscription.</p>",
    "TagResource": "<p>Add metadata tags to the specified Amazon Web Services resource.</p>",
    "UntagResource": "<p>Remove one or more metadata tag from the specified Amazon Web Services
resource.</p>",
    "UpdateServiceSettings": "<p>Updates the service settings for Linux subscriptions.</p>"
  },
  "shapes": {
    "Boolean": {
      "base": null,
      "refs": {
        "UpdateServiceSettingsRequest$AllowUpdate": "<p>Describes if updates are allowed to the service settings for
Linux subscriptions. If you allow updates, you can aggregate Linux subscription data in more than one home

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Region.<p>"
  }
},
"BoxInteger": {
  "base": null,
  "refs": {
    "ListLinuxSubscriptionInstancesRequest$MaxResults": "<p>The maximum items to return in a request.</p>",
    "ListLinuxSubscriptionsRequest$MaxResults": "<p>The maximum items to return in a request.</p>"
  }
},
"BoxLong": {
  "base": null,
  "refs": {
    "Subscription$InstanceCount": "<p>The total amount of running instances using this subscription.</p>"
  }
},
"DeregisterSubscriptionProviderRequest": {
  "base": null,
  "refs": {
  }
},
"DeregisterSubscriptionProviderResponse": {
  "base": null,
  "refs": {
  }
},
"Filter": {
  "base": "<p>A filter object that is used to return more specific results from a describe operation. Filters can be
used to match a set of resources by specific criteria.</p>",
  "refs": {
    "FilterList$member": null
  }
},
"FilterList": {
  "base": null,
  "refs": {

```

"ListLinuxSubscriptionInstancesRequest\$Filters": "<p>An array of structures that you can use to filter the results by your specified criteria. For example, you can specify `Region` in the `Name`, with the `contains` operator to list all subscriptions that match a partial string in the `Value`, such as `us-west`.</p> <p>For each filter, you can specify one of the following values for the `Name` key to streamline results:</p> <ul> <li><p> `AccountID` </p> </li> <li><p> `AmiID` </p> </li> <li><p> `DualSubscription` </p> </li> <li><p> `InstanceID` </p> </li> <li><p> `InstanceType` </p> </li> <li><p> `ProductCode` </p> </li> <li><p> `Region` </p> </li> <li><p> `Status` </p> </li> <li><p> `UsageOperation` </p> </li> </ul> <p>For each filter, you can use one of the following `Operator` values to define the behavior



of the filter:

- `contains`
- `equals`
- `Notequal`

"ListLinuxSubscriptionsRequest\$Filters": "

An array of structures that you can use to filter the results to those that match one or more sets of key-value pairs that you specify. For example, you can filter by the name of `Subscription` with an optional operator to see subscriptions that match, partially match, or don't match a certain subscription's name.

The valid names for this filter are:

- `Subscription`

The valid Operators for this filter are:

- `contains`
- `equals`
- `Notequal`

"

}

},

"GetRegisteredSubscriptionProviderRequest": {

"base": null,

"refs": {

}

},

"GetRegisteredSubscriptionProviderResponse": {

"base": null,

"refs": {

}

},

"GetServiceSettingsRequest": {

"base": null,

"refs": {

}

},

"GetServiceSettingsResponse": {

"base": null,

"refs": {

}

},

"Instance": {

"base": "

Details discovered information about a running instance using Linux subscriptions.

",

"refs": {

"InstanceList\$member": null

}

},

"InstanceList": {

"base": null,

"refs": {

"ListLinuxSubscriptionInstancesResponse\$Instances": "

An array that contains instance objects.

"

}

},

"InternalServerError": {

"base": "

An exception occurred with the service.

",

"refs": {

}

},

```

"LinuxSubscriptionsDiscovery": {
  "base": null,
  "refs": {
    "GetServiceSettingsResponse$LinuxSubscriptionsDiscovery": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>",
    "UpdateServiceSettingsRequest$LinuxSubscriptionsDiscovery":
"<p>Describes if the discovery of Linux subscriptions is enabled.</p>",
    "UpdateServiceSettingsResponse$LinuxSubscriptionsDiscovery": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
  }
},
"LinuxSubscriptionsDiscoverySettings": {
  "base": "<p>Lists the settings defined for discovering Linux subscriptions.</p>",
  "refs": {
    "GetServiceSettingsResponse$LinuxSubscriptionsDiscoverySettings": "<p>Lists the settings defined for Linux subscriptions discovery. The settings include if Organizations integration has been enabled, and which Regions data will be aggregated from.</p>",
    "UpdateServiceSettingsRequest$LinuxSubscriptionsDiscoverySettings": "<p>The settings defined for Linux subscriptions discovery. The settings include if Organizations integration has been enabled, and which Regions data will be aggregated from.</p>",
    "UpdateServiceSettingsResponse$LinuxSubscriptionsDiscoverySettings": "<p>The settings defined for Linux subscriptions discovery. The settings include if Organizations integration has been enabled, and which Regions data will be aggregated from.</p>"
  }
},
"ListLinuxSubscriptionInstancesRequest": {
  "base": "<p>NextToken length limit is half of ddb accepted limit. Increase this limit if parameters in request increases.</p>",
  "refs": {
  }
},
"ListLinuxSubscriptionInstancesRequestNextTokenString": {
  "base": null,
  "refs": {
    "ListLinuxSubscriptionInstancesRequest$NextToken": "<p>A token to specify where to start paginating. This is the nextToken from a previously truncated response.</p>"
  }
},
"ListLinuxSubscriptionInstancesResponse": {
  "base": null,
  "refs": {
  }
},
"ListLinuxSubscriptionsRequest": {
  "base": "<p>NextToken length limit is half of ddb accepted limit. Increase this limit if parameters in request increases.</p>",
  "refs": {
  }
}

```

```

    },
    "ListLinuxSubscriptionsRequestNextTokenString":
    {
        "base": null,
        "refs": {
            "ListLinuxSubscriptionsRequest$NextToken": "<p>A token to specify where to start paginating. This is the
nextToken from a previously truncated response.</p>"
        }
    },
    "ListLinuxSubscriptionsResponse": {
        "base": null,
        "refs": {
        }
    },
    "ListRegisteredSubscriptionProvidersRequest": {
        "base": null,
        "refs": {
        }
    },
    "ListRegisteredSubscriptionProvidersRequestMaxResultsInteger": {
        "base": null,
        "refs": {
            "ListRegisteredSubscriptionProvidersRequest$MaxResults": "<p>The maximum items to return in a
request.</p>"
        }
    },
    "ListRegisteredSubscriptionProvidersResponse": {
        "base": null,
        "refs": {
        }
    },
    "ListTagsForResourceRequest": {
        "base": null,
        "refs": {
        }
    },
    "ListTagsForResourceResponse": {
        "base": null,
        "refs": {
        }
    },
    "Operator": {
        "base": null,
        "refs":
    {
        "Filter$Operator": "<p>An operator for filtering results.</p>"
    }
    },

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"OrganizationIntegration": {
  "base": null,
  "refs": {
    "LinuxSubscriptionsDiscoverySettings$OrganizationIntegration": "<p>Details if you have enabled resource
discovery across your accounts in Organizations.</p>"
  }
},
"ProductCodeList": {
  "base": null,
  "refs": {
    "Instance$ProductCode": "<p>The product code for the instance. For more information, see <a
href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-
operation.html\">Usage operation values</a> in the <i>License Manager User Guide</i> .</p>"
  }
},
"RegisterSubscriptionProviderRequest": {
  "base": null,
  "refs": {
  }
},
"RegisterSubscriptionProviderResponse": {
  "base": null,
  "refs": {
  }
},
"RegisteredSubscriptionProvider": {
  "base": "<p>A third-party provider for operating system
(OS) platform software and license subscriptions, such as Red Hat. When you register a third-party Linux
subscription provider, License Manager can get subscription data from the registered provider.</p>",
  "refs": {
    "RegisteredSubscriptionProviderList$member": null
  }
},
"RegisteredSubscriptionProviderList": {
  "base": null,
  "refs": {
    "ListRegisteredSubscriptionProvidersResponse$RegisteredSubscriptionProviders": "<p>The list of BYOL
registration resources that fit the criteria you specified in the request.</p>"
  }
},
"ResourceNotFoundException": {
  "base": "<p>Unable to find the requested Amazon Web Services resource.</p>",
  "refs": {
  }
},
"SecretArn": {
  "base": null,
  "refs": {

```

"GetRegisteredSubscriptionProviderResponse\$SecretArn": "<p>The Amazon Resource Name (ARN) of the third-party access secret stored in Secrets Manager for the BYOL registration resource specified in the request.</p>",

"RegisterSubscriptionProviderRequest\$SecretArn": "<p>The Amazon Resource Name (ARN) of the secret where you've stored your subscription provider's access token. For RHEL subscriptions managed through the Red Hat Subscription Manager (RHSM), the secret contains your Red Hat Offline token.</p>",

"RegisteredSubscriptionProvider\$SecretArn": "<p>The Amazon Resource Name (ARN) of the Secrets Manager secret that stores your registered Linux subscription provider access token. For RHEL account subscriptions, this is the offline token.</p>"

```

    }
  },
  "Status": {
    "base": null,
    "refs": {
      "GetServiceSettingsResponse$Status": "<p>Indicates the status of Linux subscriptions settings being applied.</p>",
      "UpdateServiceSettingsResponse$Status": "<p>Indicates the status of Linux subscriptions settings being applied.</p>"
    }
  },
  "String": {
    "base": null,
    "refs": {
      "Filter$Name": "<p>The type of name to filter by.</p>",
      "GetRegisteredSubscriptionProviderResponse$LastSuccessfulDataRetrievalTime": "<p>The timestamp from the last time License Manager retrieved subscription details from your registered third-party Linux subscription provider.</p>",
      "GetRegisteredSubscriptionProviderResponse$SubscriptionProviderStatusMessage": "<p>The detailed message from your subscription provider token status.</p>",
      "Instance$AccountID": "<p>The account ID which owns the instance.</p>",
      "Instance$AmiId": "<p>The AMI ID used to launch the instance.</p>",
      "Instance$DualSubscription": "<p>Indicates that you have two different license subscriptions for the same software on your instance.</p>",
      "Instance$InstanceID": "<p>The instance ID of the resource.</p>",
      "Instance$InstanceType": "<p>The instance type of the resource.</p>",
      "Instance$LastUpdatedTime": "<p>The time in which the last discovery updated the instance details.</p>",
      "Instance$OsVersion":
        "<p>The operating system software version that runs on your instance.</p>",
      "Instance$Region": "<p>The Region the instance is running in.</p>",
      "Instance$RegisteredWithSubscriptionProvider": "<p>Indicates that your instance uses a BYOL license subscription from a third-party Linux subscription provider that you've registered with License Manager.</p>",
      "Instance$Status": "<p>The status of the instance.</p>",
      "Instance$SubscriptionName": "<p>The name of the license subscription that the instance uses.</p>",
      "Instance$SubscriptionProviderCreateTime": "<p>The timestamp when you registered the third-party Linux subscription provider for the subscription that the instance uses.</p>",
      "Instance$SubscriptionProviderUpdateTime": "<p>The timestamp from the last time that the instance synced with the registered third-party Linux subscription provider.</p>",
      "Instance$UsageOperation": "<p>The usage operation of the instance. For more information,

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see For more information, see [Usage operation values](https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html) in the *License Manager User Guide*.

"InternalServerException\$message": null,

"ListLinuxSubscriptionInstancesResponse\$NextToken": "

The next token used for paginated responses. When this field isn't empty, there are additional elements that the service hasn't included in this request. Use this token with the next request to retrieve additional objects.

",

"ListLinuxSubscriptionsResponse\$NextToken": "

The next token used for paginated responses. When this field isn't empty, there are additional elements that the service hasn't included in this request. Use this token with the next request to retrieve additional objects.

",

"ListRegisteredSubscriptionProvidersRequest\$NextToken": "

A token to specify where to start paginating. This is the nextToken from a previously truncated response.

",

"ListRegisteredSubscriptionProvidersResponse\$NextToken": "

The next token used for paginated responses. When this field isn't empty, there are additional elements that the service hasn't included in this request. Use this token with the next request to retrieve additional objects.

",

"ProductCodeList\$member": null,

"RegisterSubscriptionProviderResponse\$SubscriptionProviderArn": "

The Amazon Resource Name (ARN) of the Linux subscription provider resource that you registered.

",

"RegisteredSubscriptionProvider\$LastSuccessfulDataRetrievalTime": "

The timestamp from the last time that License Manager accessed third-party subscription data for your account from your registered Linux subscription provider.

",

"RegisteredSubscriptionProvider\$SubscriptionProviderStatusMessage": "

A detailed message that's associated with your BYOL subscription provider token status.

",

"ResourceNotFoundException\$message":  
null,

"StringMap\$key": null,

"StringMap\$value": null,

"Subscription\$Name": "

The name of the subscription.

",

"Subscription\$Type": "

The type of subscription. The type can be subscription-included with Amazon EC2, Bring Your Own Subscription model (BYOS), or from the Amazon Web Services Marketplace. Certain subscriptions may use licensing from the Amazon Web Services Marketplace as well as OS licensing from Amazon EC2 or BYOS.

",

"TagKeyList\$member": null,

"Tags\$key": null,

"Tags\$value": null,

"ThrottlingException\$message": null,

"ValidationException\$message": null

}

},

"StringList": {

"base": null,

"refs": {

"Filter\$Values": "

One or more values for the name to filter by.

",

"GetServiceSettingsResponse\$HomeRegions": "

The Region in which License Manager displays the aggregated data for Linux subscriptions.

",

"LinuxSubscriptionsDiscoverySettings\$SourceRegions":

```

"<p>The Regions in which to discover data for Linux subscriptions.</p>",
  "UpdateServiceSettingsResponse$HomeRegions": "<p>The Region in which License Manager displays the
aggregated data for Linux subscriptions.</p>"
  }
},
"StringListMemberString": {
  "base": null,
  "refs": {
    "StringList$member": null
  }
},
"StringMap": {
  "base": null,
  "refs": {
    "GetServiceSettingsResponse$StatusMessage": "<p>A message which details the Linux subscriptions service
settings current status.</p>",
    "UpdateServiceSettingsResponse$StatusMessage": "<p>A message which details the Linux subscriptions
service settings current status.</p>"
  }
},
"Subscription": {
  "base": "<p>An object which details a discovered Linux subscription.</p>",
  "refs": {
    "SubscriptionList$member": null
  }
},
"SubscriptionList": {
  "base": null,
  "refs": {
    "ListLinuxSubscriptionsResponse$Subscriptions":
"<p>An array that contains subscription objects.</p>"
  }
},
"SubscriptionProviderArn": {
  "base": null,
  "refs": {
    "DeregisterSubscriptionProviderRequest$SubscriptionProviderArn": "<p>The Amazon Resource Name (ARN)
of the subscription provider resource to deregister.</p>",
    "GetRegisteredSubscriptionProviderRequest$SubscriptionProviderArn": "<p>The Amazon Resource Name
(ARN) of the BYOL registration resource to get details for.</p>",
    "GetRegisteredSubscriptionProviderResponse$SubscriptionProviderArn": "<p>The Amazon Resource Name
(ARN) for the BYOL registration resource specified in the request.</p>",
    "ListTagsForResourceRequest$resourceArn": "<p>The Amazon Resource Name (ARN) of the resource for
which to list metadata tags.</p>",
    "RegisteredSubscriptionProvider$SubscriptionProviderArn": "<p>The Amazon Resource Name (ARN) of the
Linux subscription provider resource that you registered.</p>",
    "TagResourceRequest$resourceArn": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to which to add the specified metadata tags.</p>",

```

```

    "UntagResourceRequest$resourceArn": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to remove the metadata tags from.</p>"
  }
},
"SubscriptionProviderSource": {
  "base": null,
  "refs": {
    "GetRegisteredSubscriptionProviderResponse$SubscriptionProviderSource": "<p>The subscription provider for
the BYOL registration resource specified in the request.</p>",
    "RegisterSubscriptionProviderRequest$SubscriptionProviderSource": "<p>The supported Linux subscription
provider to register.</p>",
    "RegisterSubscriptionProviderResponse$SubscriptionProviderSource": "<p>The Linux subscription provider
that you registered.</p>",
    "RegisteredSubscriptionProvider$SubscriptionProviderSource": "<p>A supported third-party Linux
subscription provider. License
Manager currently supports Red Hat subscriptions.</p>",
    "SubscriptionProviderSourceList$member": null
  }
},
"SubscriptionProviderSourceList": {
  "base": null,
  "refs": {
    "ListRegisteredSubscriptionProvidersRequest$SubscriptionProviderSources": "<p>To filter your results,
specify which subscription providers to return in the list.</p>"
  }
},
"SubscriptionProviderStatus": {
  "base": null,
  "refs": {
    "GetRegisteredSubscriptionProviderResponse$SubscriptionProviderStatus": "<p>The status of the Linux
subscription provider access token from the last successful subscription data request.</p>",
    "RegisterSubscriptionProviderResponse$SubscriptionProviderStatus": "<p>Indicates the status of the
registration action for the Linux subscription provider that you requested.</p>",
    "RegisteredSubscriptionProvider$SubscriptionProviderStatus": "<p>Indicates the status of your registered
Linux subscription provider access
token from the last time License Manager retrieved subscription data. For RHEL account subscriptions, this is the
status of the offline token.</p>"
  }
},
"TagKeyList": {
  "base": null,
  "refs": {
    "UntagResourceRequest$tagKeys": "<p>A list of metadata tag keys to remove from the requested
resource.</p>"
  }
},
"TagResourceRequest": {
  "base": null,

```



```

    "refs": {
    }
  },
  "TagResourceResponse": {
    "base": null,
    "refs": {
    }
  },
  "Tags": {
    "base": null,
    "refs": {
      "ListTagsForResourceResponse$tags": "<p>The metadata tags for the requested resource.</p>",
      "RegisterSubscriptionProviderRequest$Tags": "<p>The metadata tags to assign to your registered Linux
subscription provider resource.</p>",
      "TagResourceRequest$tags": "<p>The metadata tags to assign to the Amazon Web Services resource. Tags are
formatted as key value pairs.</p>"
    }
  },
  "ThrottlingException": {
    "base": "<p>The request was denied due to request throttling.</p>",
    "refs": {
    }
  },
  "UntagResourceRequest": {
    "base": null,
    "refs": {
    }
  },
  "UntagResourceResponse": {
    "base": null,
    "refs": {
    }
  },
  "UpdateServiceSettingsRequest": {
    "base": null,
    "refs": {
    }
  },
  "UpdateServiceSettingsResponse": {
    "base": null,
    "refs": {
    }
  },
  "ValidationException": {
    "base": "<p>The provided input is not valid. Try your request again.</p>",
    "refs": {
    }
  }
}

```

```

}
}
{
  "version": "1.0",
  "parameters": {
    "Region": {
      "builtIn": "AWS::Region",
      "required": false,
      "documentation": "The AWS region used to dispatch the request.",
      "type": "String"
    },
    "UseDualStack": {
      "builtIn": "AWS::UseDualStack",
      "required": true,
      "default": false,
      "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-
stack, dispatching the request MAY return an error.",
      "type": "Boolean"
    },
    "UseFIPS": {
      "builtIn": "AWS::UseFIPS",
      "required": true,
      "default": false,
      "documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured
endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
      "type": "Boolean"
    },
    "Endpoint": {
      "builtIn": "SDK::Endpoint",
      "required": false,
      "documentation": "Override the endpoint used to send this request",
      "type": "String"
    }
  },
  "rules": [
    {
      "conditions": [
        {
          "fn": "aws.partition",
          "argv": [
            {
              "ref": "Region"
            }
          ],
          "assign": "PartitionResult"
        }
      ],
    }
  ],

```

```

"type": "tree",
"rules": [
  {
    "conditions": [
      {
        "fn": "isSet",
        "argv": [
          {
            "ref": "Endpoint"
          }
        ]
      },
      {
        "fn": "parseURL",

        "argv": [
          {
            "ref": "Endpoint"
          }
        ],
        "assign": "url"
      }
    ],
    "type": "tree",
    "rules": [
      {
        "conditions": [
          {
            "fn": "booleanEquals",
            "argv": [
              {
                "ref": "UseFIPS"
              },
              true
            ]
          }
        ],
        "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
        "type": "error"
      },
      {
        "conditions": [],
        "type": "tree",
        "rules": [
          {
            "conditions": [
              {
                "fn": "booleanEquals",

```

```

        "argv": [
            {
                "ref": "UseDualStack"
            },
            true
        ]
    },
    "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
    "type": "error"
},

{
    "conditions": [],
    "endpoint": {
        "url": {
            "ref": "Endpoint"
        },
        "properties": {},
        "headers": {}
    },
    "type": "endpoint"
}
]
},
{
    "conditions": [
        {
            "fn": "booleanEquals",
            "argv": [
                {
                    "ref": "UseFIPS"
                },
                true
            ]
        }
    ],

    {
        "fn": "booleanEquals",
        "argv": [
            {
                "ref": "UseDualStack"
            },
            true
        ]
    }
}

```

```

],
"type": "tree",
"rules": [
  {
    "conditions": [
      {
        "fn": "booleanEquals",
        "argv": [
          true,
          {
            "fn": "getAttr",
            "argv": [
              {
                "ref": "PartitionResult"
              }
            ]
          }
        ],
        "supportsFIPS"
      }
    ]
  },
  {
    "fn": "booleanEquals",
    "argv": [
      true,
      {
        "fn": "getAttr",
        "argv": [
          {
            "ref": "PartitionResult"
          },
          "supportsDualStack"
        ]
      }
    ]
  }
],
"type": "tree",
"rules": [
  {
    "conditions": [],
    "endpoint": {
      "url": "https://license-manager-user-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
      "properties": {},
      "headers": {}
    },
  },

```

```

        "type": "endpoint"
      }
    ]
  },
  {
    "conditions": [],
    "error": "FIPS and DualStack are enabled, but this partition does not support one or both",
    "type": "error"
  }
]
},
{
  "conditions": [
    {
      "fn": "booleanEquals",
      "argv": [
        {
          "ref": "UseFIPS"
        },
        true
      ]
    }
  ],
  "type": "tree",
  "rules": [
    {
      "conditions": [
        {
          "fn": "booleanEquals",
          "argv": [
            true,
            {
              "fn": "getAttr",
              "argv": [
                {
                  "ref": "PartitionResult"
                },
                "supportsFIPS"
              ]
            }
          ]
        }
      ]
    }
  ],
  "type": "tree",
  "rules": [
    {
      "conditions": [],

```

```

        "endpoint": {
            "url": "https://license-manager-user-subscriptions-
fips.{Region}.{PartitionResult#dnsSuffix}",
            "properties": {},
            "headers": {}
        },
        "type": "endpoint"
    }
]
},
{
    "conditions": [],
    "error": "FIPS is enabled but this partition does not support FIPS",
    "type": "error"
}
],
},
{
    "conditions": [
        {
            "fn": "booleanEquals",
            "argv": [
                {
                    "ref": "UseDualStack"
                },
                true
            ]
        }
    ],
    "type": "tree",
    "rules": [
        {
            "conditions": [
                {
                    "fn": "booleanEquals",
                    "argv": [
                        true,
                    ]
                }
            ],
            "fn": "getAttr",
            "argv": [
                {
                    "ref": "PartitionResult"
                },
                "supportsDualStack"
            ]
        }
    ]
}
}

```

```

    ]
  }
],
"type": "tree",
"rules": [
  {
    "conditions": [],
    "endpoint": {
      "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
      "properties": {},

      "headers": {}
    },
    "type": "endpoint"
  }
],
{
  "conditions": [],
  "error": "DualStack is enabled but this partition does not support DualStack",
  "type": "error"
}
]
},
{
  "conditions": [],
  "endpoint": {
    "url": "https://license-manager-user-subscriptions.{Region}.{PartitionResult#dnsSuffix}",
    "properties": {},
    "headers": {}
  },
  "type": "endpoint"
}
]
}
]
}

```

AWS SDK for Go

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```

{
  "testCases": [
    {
      "documentation": "For region ap-south-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions-fips.ap-south-1.api.aws"

```



```

    }
  },
  "params": {
    "UseFIPS": true,
    "Region": "ap-south-1",
    "UseDualStack": true
  }
},
{
  "documentation": "For region ap-south-1 with FIPS enabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-user-subscriptions-fips.ap-south-1.amazonaws.com"
    }
  },
  "params": {
    "UseFIPS": true,
    "Region": "ap-south-1",
    "UseDualStack": false
  }
},
{
  "documentation": "For region ap-south-1 with FIPS disabled
and DualStack enabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-user-subscriptions.ap-south-1.api.aws"
    }
  },
  "params": {
    "UseFIPS": false,
    "Region": "ap-south-1",
    "UseDualStack": true
  }
},
{
  "documentation": "For region ap-south-1 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-user-subscriptions.ap-south-1.amazonaws.com"
    }
  },
  "params": {
    "UseFIPS": false,
    "Region": "ap-south-1",
    "UseDualStack": false
  }
},

```

```

{
  "documentation": "For region eu-south-1 with FIPS enabled and DualStack enabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-user-subscriptions-fips.eu-south-1.api.aws"
    }
  },
  "params": {
    "UseFIPS": true,
    "Region": "eu-south-1",
    "UseDualStack": true
  }
},
{
  "documentation": "For region eu-south-1 with FIPS enabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-user-subscriptions-fips.eu-south-1.amazonaws.com"
    }
  },
  "params": {
    "UseFIPS": true,
    "Region": "eu-south-1",
    "UseDualStack": false
  }
},
{
  "documentation": "For region eu-south-1 with FIPS disabled and DualStack enabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-user-subscriptions.eu-south-1.api.aws"
    }
  },
  "params": {
    "UseFIPS": false,
    "Region": "eu-south-1",
    "UseDualStack": true
  }
},
{
  "documentation": "For region eu-south-1 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-user-subscriptions.eu-south-1.amazonaws.com"
    }
  },
  "params": {

```

```

    "UseFIPS": false,
    "Region": "eu-south-1",
    "UseDualStack": false
  }
},
{
  "documentation": "For region ca-central-1 with FIPS enabled and DualStack enabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-user-subscriptions-fips.ca-central-1.api.aws"
    }
  },
  "params": {
    "UseFIPS": true,
    "Region": "ca-central-1",

    "UseDualStack": true
  }
},
{
  "documentation": "For region ca-central-1 with FIPS enabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-user-subscriptions-fips.ca-central-1.amazonaws.com"
    }
  },
  "params": {
    "UseFIPS": true,
    "Region": "ca-central-1",
    "UseDualStack": false
  }
},
{
  "documentation": "For region ca-central-1 with FIPS disabled and DualStack enabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-user-subscriptions.ca-central-1.api.aws"
    }
  },
  "params": {
    "UseFIPS": false,
    "Region": "ca-central-1",
    "UseDualStack": true
  }
},
{
  "documentation":

```

```

"For region ca-central-1 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-user-subscriptions.ca-central-1.amazonaws.com"
    }
  },
  "params": {
    "UseFIPS": false,
    "Region": "ca-central-1",
    "UseDualStack": false
  }
},
{
  "documentation": "For region eu-central-1 with FIPS enabled and DualStack enabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-user-subscriptions-fips.eu-central-1.api.aws"
    }
  },
  "params": {
    "UseFIPS": true,
    "Region": "eu-central-1",
    "UseDualStack": true
  }
},
{
  "documentation": "For region eu-central-1 with FIPS enabled and DualStack disabled",
  "expect":
{
  "endpoint": {
    "url": "https://license-manager-user-subscriptions-fips.eu-central-1.amazonaws.com"
  }
},
  "params": {
    "UseFIPS": true,
    "Region": "eu-central-1",
    "UseDualStack": false
  }
},
{
  "documentation": "For region eu-central-1 with FIPS disabled and DualStack enabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-user-subscriptions.eu-central-1.api.aws"
    }
  },
  "params": {
    "UseFIPS": false,

```

```

    "Region": "eu-central-1",
    "UseDualStack": true
  }
},
{
  "documentation": "For region eu-central-1 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-user-subscriptions.eu-central-1.amazonaws.com"
    }
  },
  "params": {
    "UseFIPS": false,
    "Region": "eu-central-1",
    "UseDualStack": false
  }
},
{
  "documentation": "For region us-west-1 with FIPS enabled and DualStack enabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-user-subscriptions-fips.us-west-1.api.aws"
    }
  },
  "params": {
    "UseFIPS": true,
    "Region": "us-west-1",
    "UseDualStack": true
  }
},
{
  "documentation": "For region us-west-1 with FIPS enabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-user-subscriptions-fips.us-west-1.amazonaws.com"
    }
  },
  "params":
{
  "UseFIPS": true,
  "Region": "us-west-1",
  "UseDualStack": false
}
},
{
  "documentation": "For region us-west-1 with FIPS disabled and DualStack enabled",
  "expect": {
    "endpoint": {

```

```

        "url": "https://license-manager-user-subscriptions.us-west-1.api.aws"
    }
},
"params": {
    "UseFIPS": false,
    "Region": "us-west-1",
    "UseDualStack": true
}
},
{
    "documentation": "For region us-west-1 with FIPS disabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager-user-subscriptions.us-west-1.amazonaws.com"
        }
    },
    "params": {
        "UseFIPS": false,
        "Region": "us-west-1",
        "UseDualStack": false
    }
},
{
    "documentation": "For region us-west-2 with FIPS enabled and DualStack enabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager-user-subscriptions-fips.us-west-2.api.aws"
        }
    },
    "params": {
        "UseFIPS": true,
        "Region": "us-west-2",
        "UseDualStack": true
    }
},
{
    "documentation": "For region us-west-2 with FIPS enabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager-user-subscriptions-fips.us-west-2.amazonaws.com"
        }
    },
    "params": {
        "UseFIPS": true,
        "Region": "us-west-2",
        "UseDualStack": false
    }
},

```

```

{
  "documentation": "For region us-west-2 with FIPS disabled
and DualStack enabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-user-subscriptions.us-west-2.api.aws"
    }
  },
  "params": {
    "UseFIPS": false,
    "Region": "us-west-2",
    "UseDualStack": true
  }
},
{
  "documentation": "For region us-west-2 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-user-subscriptions.us-west-2.amazonaws.com"
    }
  },
  "params": {
    "UseFIPS": false,
    "Region": "us-west-2",
    "UseDualStack": false
  }
},
{
  "documentation": "For region af-south-1 with FIPS enabled and DualStack enabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-user-subscriptions-fips.af-south-1.api.aws"
    }
  },
  "params": {
    "UseFIPS": true,
    "Region": "af-south-1",
    "UseDualStack": true
  }
},
{
  "documentation": "For region af-south-1 with FIPS enabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-user-subscriptions-fips.af-south-1.amazonaws.com"
    }
  },
  "params": {

```

```

        "UseFIPS": true,
        "Region": "af-south-1",
        "UseDualStack": false
    }
},
{
    "documentation": "For region af-south-1 with FIPS disabled and DualStack enabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager-user-subscriptions.af-south-1.api.aws"
        }
    },
    "params": {
        "UseFIPS": false,
        "Region": "af-south-1",
        "UseDualStack": true
    }
},
{
    "documentation": "For region af-south-1 with FIPS disabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager-user-subscriptions.af-south-1.amazonaws.com"
        }
    },
    "params": {
        "UseFIPS": false,
        "Region": "af-south-1",
        "UseDualStack": false
    }
},
{
    "documentation": "For region eu-north-1 with FIPS enabled and DualStack enabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager-user-subscriptions-fips.eu-north-1.api.aws"
        }
    },
    "params": {
        "UseFIPS": true,
        "Region": "eu-north-1",
        "UseDualStack": true
    }
},
{
    "documentation": "For region eu-north-1 with FIPS enabled and DualStack disabled",

```



```

"expect": {
  "endpoint": {
    "url": "https://license-manager-user-subscriptions-fips.eu-north-1.amazonaws.com"
  }
},
"params": {
  "UseFIPS": true,
  "Region": "eu-north-1",
  "UseDualStack": false
}
},
{
  "documentation": "For region eu-north-1 with FIPS disabled and DualStack enabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-user-subscriptions.eu-north-1.api.aws"
    }
  },
  "params": {
    "UseFIPS": false,
    "Region": "eu-north-1",
    "UseDualStack": true
  }
},
{
  "documentation": "For region eu-north-1
with FIPS disabled and DualStack disabled",
  "expect": {
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    "UseDualStack": false
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    }
  },
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    "Region": "eu-west-3",

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    "UseDualStack": true
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  "params": {
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    "Region": "eu-west-3",
    "UseDualStack": false
  }
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  "expect": {
    "endpoint": {

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        "url": "https://license-manager-user-subscriptions-fips.eu-west-2.api.aws"
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    "Region": "eu-west-2",
    "UseDualStack": true
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        "Region": "eu-west-2",
        "UseDualStack": false
    }
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        "Region": "eu-west-2",
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    }
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  "UseDualStack": false
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  "params": {
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    "UseDualStack": false
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    "Region": "ap-northeast-3",
    "UseDualStack": true
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    "Region": "ap-northeast-2",
    "UseDualStack": false
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        "UseDualStack": false
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    "UseDualStack": false
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    "UseDualStack": false
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    "UseDualStack": true
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    "UseDualStack": true
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        "UseDualStack": true
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      "UseDualStack": true
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      "UseDualStack": false
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      "UseDualStack": true
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  },

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  "UseDualStack": true
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  "UseDualStack": true
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  "Region": "us-east-2",
  "UseDualStack": false
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  "Region": "us-east-1",
  "UseDualStack": false,
  "Endpoint": "https://example.com"
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  "Region": "us-east-1",
  "UseDualStack": false,
  "Endpoint": "https://example.com"
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}
],
"version": "1.0"
}
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"endpointPrefix":"license-manager",
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"protocol":"json",
"serviceFullName":"AWS License Manager",
"serviceId":"License Manager",
"signatureVersion":"v4",
"targetPrefix":"AWSLicenseManager",
"uid":"license-manager-2018-08-01"
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"AcceptGrant":{
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"http":{
"method":"POST",
"requestUri":"/"
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"output":{"shape":"AcceptGrantResponse"},
"errors":[
{"shape":"ValidationException"},
{"shape":"InvalidParameterValueException"},
{"shape":"AuthorizationException"},
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{"shape":"RateLimitExceededException"},
{"shape":"ResourceLimitExceededException"},
{"shape":"ServerInternalException"}
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"http":{
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"requestUri":"/"
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"input":{"shape":"CheckInLicenseRequest"},
"output":{"shape":"CheckInLicenseResponse"},
"errors":[]
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}

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  "output":{"shape":"CheckoutBorrowLicenseResponse"},
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    {"shape":"UnsupportedDigitalSignatureMethodException"},
    {"shape":"RedirectException"},
    {"shape":"AuthorizationException"},
    {"shape":"AccessDeniedException"},
    {"shape":"RateLimitExceededException"},
    {"shape":"ServerInternalException"}
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    {"shape":"AccessDeniedException"}
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},
"CreateGrantVersion":{
  "name":"CreateGrantVersion",
  "http":{
    "method":"POST",
    "requestUri":"/"
  },
  "input":{"shape":"CreateGrantVersionRequest"},
  "output":{"shape":"CreateGrantVersionResponse"},
  "errors":[
    {"shape":"ValidationException"},
    {"shape":"InvalidParameterValueException"},
    {"shape":"ResourceLimitExceededException"},
    {"shape":"ServerInternalException"},
    {"shape":"AuthorizationException"},
    {"shape":"AccessDeniedException"},
    {"shape":"RateLimitExceededException"}
  ]
},
"CreateLicense":{
  "name":"CreateLicense",
  "http":{
    "method":"POST",
    "requestUri":"/"
  },
  "input":{"shape":"CreateLicenseRequest"},

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"output":{"shape":"CreateLicenseResponse"},
"errors":[
  {"shape":"ValidationException"},
  {"shape":"InvalidParameterValueException"},
  {"shape":"RedirectException"},
  {"shape":"AuthorizationException"},
  {"shape":"AccessDeniedException"},
  {"shape":"RateLimitExceededException"},
  {"shape":"ServerInternalException"}
]
},
"CreateLicenseConfiguration":{
  "name":"CreateLicenseConfiguration",
  "http":{
    "method":"POST",
    "requestUri":"/"
  },

"input":{"shape":"CreateLicenseConfigurationRequest"},
"output":{"shape":"CreateLicenseConfigurationResponse"},
"errors":[
  {"shape":"InvalidParameterValueException"},
  {"shape":"ServerInternalException"},
  {"shape":"ResourceLimitExceededException"},
  {"shape":"AuthorizationException"},
  {"shape":"AccessDeniedException"},
  {"shape":"RateLimitExceededException"}
]
},
"CreateLicenseConversionTaskForResource":{
  "name":"CreateLicenseConversionTaskForResource",
  "http":{
    "method":"POST",
    "requestUri":"/"
  },
"input":{"shape":"CreateLicenseConversionTaskForResourceRequest"},
"output":{"shape":"CreateLicenseConversionTaskForResourceResponse"},
"errors":[
  {"shape":"InvalidParameterValueException"},
  {"shape":"ValidationException"},
  {"shape":"ServerInternalException"},
  {"shape":"AuthorizationException"},
  {"shape":"AccessDeniedException"},
  {"shape":"RateLimitExceededException"}
]
},
"CreateLicenseManagerReportGenerator":{
  "name":"CreateLicenseManagerReportGenerator",

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"http":{
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  "requestUri":"/"
},
"input":{"shape":"CreateLicenseManagerReportGeneratorRequest"},
"output":{"shape":"CreateLicenseManagerReportGeneratorResponse"},
"errors":[
  {"shape":"ValidationException"},
  {"shape":"InvalidParameterValueException"},
  {"shape":"ResourceLimitExceededException"},
  {"shape":"ServerInternalException"},
  {"shape":"AuthorizationException"},
  {"shape":"RateLimitExceededException"},
  {"shape":"AccessDeniedException"},
  {"shape":"ResourceNotFoundException"}
]
},
"CreateLicenseVersion":{
  "name":"CreateLicenseVersion",
  "http":{
    "method":"POST",
    "requestUri":"/"
  },
  "input":{"shape":"CreateLicenseVersionRequest"},
  "output":{"shape":"CreateLicenseVersionResponse"},
  "errors":[
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    {"shape":"AccessDeniedException"},
    {"shape":"ResourceNotFoundException"},
    {"shape":"RedirectException"},
    {"shape":"ConflictException"},
    {"shape":"ServerInternalException"},
    {"shape":"AuthorizationException"},
    {"shape":"RateLimitExceededException"}
  ]
},
"CreateToken":{
  "name":"CreateToken",
  "http":{
    "method":"POST",
    "requestUri":"/"
  },
  "input":{"shape":"CreateTokenRequest"},
  "output":{"shape":"CreateTokenResponse"},
  "errors":[
    {"shape":"ValidationException"},
    {"shape":"AuthorizationException"},
    {"shape":"AccessDeniedException"},

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    {"shape":"RateLimitExceededException"},
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    {"shape":"ServerInternalException"},
    {"shape":"ResourceNotFoundException"},
    {"shape":"RedirectException"}
  ]
},
"DeleteGrant":{
  "name":"DeleteGrant",
  "http":{
    "method":"POST",
    "requestUri":"/"
  },
  "input":{"shape":"DeleteGrantRequest"},
  "output":{"shape":"DeleteGrantResponse"},
  "errors":[
    {"shape":"ValidationException"},
    {"shape":"InvalidParameterValueException"},
    {"shape":"AuthorizationException"},
    {"shape":"AccessDeniedException"},
    {"shape":"RateLimitExceededException"},
    {"shape":"ResourceLimitExceededException"},
    {"shape":"ServerInternalException"}
  ]
},
"DeleteLicense":{
  "name":"DeleteLicense",
  "http":{
    "method":"POST",
    "requestUri":"/"
  },
  "input":{"shape":"DeleteLicenseRequest"},
  "output":{"shape":"DeleteLicenseResponse"},
  "errors":[
    {"shape":"ValidationException"},
    {"shape":"InvalidParameterValueException"},
    {"shape":"RedirectException"},
    {"shape":"ConflictException"},

    {"shape":"ServerInternalException"},
    {"shape":"AuthorizationException"},
    {"shape":"AccessDeniedException"},
    {"shape":"RateLimitExceededException"}
  ]
},
"DeleteLicenseConfiguration":{
  "name":"DeleteLicenseConfiguration",
  "http":{

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    "method":"POST",
    "requestUri":"/"
  },
  "input":{"shape":"DeleteLicenseConfigurationRequest"},
  "output":{"shape":"DeleteLicenseConfigurationResponse"},
  "errors":[
    {"shape":"InvalidParameterValueException"},
    {"shape":"ServerInternalException"},
    {"shape":"AuthorizationException"},
    {"shape":"AccessDeniedException"},
    {"shape":"RateLimitExceededException"}
  ]
},
"DeleteLicenseManagerReportGenerator":{
  "name":"DeleteLicenseManagerReportGenerator",
  "http":{
    "method":"POST",
    "requestUri":"/"
  },
  "input":{"shape":"DeleteLicenseManagerReportGeneratorRequest"},
  "output":{"shape":"DeleteLicenseManagerReportGeneratorResponse"},
  "errors":[
    {"shape":"ValidationException"},
    {"shape":"InvalidParameterValueException"},
    {"shape":"ResourceLimitExceededException"},
    {"shape":"ServerInternalException"},
    {"shape":"AuthorizationException"},
    {"shape":"RateLimitExceededException"},
    {"shape":"AccessDeniedException"},
    {"shape":"ResourceNotFoundException"}
  ]
},
"DeleteToken":{
  "name":"DeleteToken",
  "http":{
    "method":"POST",
    "requestUri":"/"
  },
  "input":{"shape":"DeleteTokenRequest"},
  "output":{"shape":"DeleteTokenResponse"},
  "errors":[
    {"shape":"ValidationException"},
    {"shape":"AuthorizationException"},
    {"shape":"AccessDeniedException"},
    {"shape":"RateLimitExceededException"},
    {"shape":"ServerInternalException"},
    {"shape":"ResourceNotFoundException"},
    {"shape":"RedirectException"}
  ]
}

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]
},
"ExtendLicenseConsumption":{
  "name":"ExtendLicenseConsumption",
  "http":{
    "method":"POST",
    "requestUri":"/"
  },
  "input":{"shape":"ExtendLicenseConsumptionRequest"},
  "output":{"shape":"ExtendLicenseConsumptionResponse"},
  "errors":[
    {"shape":"ValidationException"},
    {"shape":"InvalidParameterValueException"},
    {"shape":"AuthorizationException"},
    {"shape":"AccessDeniedException"},
    {"shape":"RateLimitExceededException"},
    {"shape":"ServerInternalException"},
    {"shape":"ResourceNotFoundException"}
  ]
},
"GetAccessToken":{
  "name":"GetAccessToken",
  "http":{
    "method":"POST",
    "requestUri":"/"
  },
  "input":{"shape":"GetAccessTokenRequest"},
  "output":{"shape":"GetAccessTokenResponse"},
  "errors":[
    {"shape":"ValidationException"},
    {"shape":"AuthorizationException"},
    {"shape":"AccessDeniedException"},
    {"shape":"RateLimitExceededException"},
    {"shape":"ServerInternalException"}
  ]
},
"GetGrant":{
  "name":"GetGrant",
  "http":{
    "method":"POST",
    "requestUri":"/"
  },
  "input":{"shape":"GetGrantRequest"},
  "output":{"shape":"GetGrantResponse"},
  "errors":[
    {"shape":"ValidationException"},
    {"shape":"InvalidParameterValueException"},

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    {"shape":"ResourceLimitExceededException"},
    {"shape":"ServerInternalException"},
    {"shape":"AuthorizationException"},
    {"shape":"AccessDeniedException"},
    {"shape":"RateLimitExceededException"}
  ]
},
"GetLicense":{
  "name":"GetLicense",
  "http":{
    "method":"POST",
    "requestUri":"/"
  },
  "input":{"shape":"GetLicenseRequest"},
  "output":{"shape":"GetLicenseResponse"},
  "errors":[
    {"shape":"ValidationException"},
    {"shape":"InvalidParameterValueException"},
    {"shape":"AuthorizationException"},
    {"shape":"AccessDeniedException"},
    {"shape":"RateLimitExceededException"},
    {"shape":"ServerInternalException"}
  ]
},
"GetLicenseConfiguration":{
  "name":"GetLicenseConfiguration",
  "http":{
    "method":"POST",
    "requestUri":"/"
  },
  "input":{"shape":"GetLicenseConfigurationRequest"},
  "output":{"shape":"GetLicenseConfigurationResponse"},
  "errors":[
    {"shape":"InvalidParameterValueException"},
    {"shape":"ServerInternalException"},
    {"shape":"AuthorizationException"},
    {"shape":"AccessDeniedException"},
    {"shape":"RateLimitExceededException"}
  ]
},
"GetLicenseConversionTask":{
  "name":"GetLicenseConversionTask",
  "http":{
    "method":"POST",
    "requestUri":"/"
  },
  "input":{"shape":"GetLicenseConversionTaskRequest"},
  "output":{"shape":"GetLicenseConversionTaskResponse"},

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"errors":[
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  {"shape":"ServerInternalException"},
  {"shape":"AuthorizationException"},
  {"shape":"AccessDeniedException"},
  {"shape":"RateLimitExceededException"}
]
},
"GetLicenseManagerReportGenerator":{
  "name":"GetLicenseManagerReportGenerator",
  "http":{
    "method":"POST",
    "requestUri":"/"
  },
  "input":{"shape":"GetLicenseManagerReportGeneratorRequest"},
  "output":{"shape":"GetLicenseManagerReportGeneratorResponse"},
  "errors":[
    {"shape":"ValidationException"},
    {"shape":"InvalidParameterValueException"},
    {"shape":"ResourceLimitExceededException"},
    {"shape":"ServerInternalException"},
    {"shape":"AuthorizationException"},
    {"shape":"RateLimitExceededException"},
    {"shape":"AccessDeniedException"},
    {"shape":"ResourceNotFoundException"}
  ]
},
"GetLicenseUsage":{
  "name":"GetLicenseUsage",
  "http":{
    "method":"POST",
    "requestUri":"/"
  },
  "input":{"shape":"GetLicenseUsageRequest"},
  "output":{"shape":"GetLicenseUsageResponse"},
  "errors":[
    {"shape":"ValidationException"},
    {"shape":"InvalidParameterValueException"},
    {"shape":"AuthorizationException"},
    {"shape":"AccessDeniedException"},
    {"shape":"RateLimitExceededException"},
    {"shape":"ServerInternalException"}
  ]
},
"GetServiceSettings":{
  "name":"GetServiceSettings",
  "http":{
    "method":"POST",

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    "requestUri":"/"
  },
  "input":{"shape":"GetServiceSettingsRequest"},
  "output":{"shape":"GetServiceSettingsResponse"},
  "errors":[
    {"shape":"ServerInternalException"},
    {"shape":"AuthorizationException"},
    {"shape":"AccessDeniedException"},
    {"shape":"RateLimitExceededException"}
  ]
},
"ListAssociationsForLicenseConfiguration":{
  "name":"ListAssociationsForLicenseConfiguration",
  "http":{
    "method":"POST",
    "requestUri":"/"
  },
  "input":{"shape":"ListAssociationsForLicenseConfigurationRequest"},
  "output":{"shape":"ListAssociationsForLicenseConfigurationResponse"},
  "errors":[
    {"shape":"InvalidParameterValueException"},
    {"shape":"FilterLimitExceededException"},
    {"shape":"ServerInternalException"},
    {"shape":"AuthorizationException"},
    {"shape":"AccessDeniedException"},
    {"shape":"RateLimitExceededException"}
  ]
},
"ListDistributedGrants":{
  "name":"ListDistributedGrants",
  "http":{
    "method":"POST",
    "requestUri":"/"
  },
  "input":{"shape":"ListDistributedGrantsRequest"},
  "output":{"shape":"ListDistributedGrantsResponse"},
  "errors":[
    {"shape":"ValidationException"},
    {"shape":"InvalidParameterValueException"},
    {"shape":"ResourceLimitExceededException"},
    {"shape":"ServerInternalException"},
    {"shape":"AuthorizationException"},
    {"shape":"AccessDeniedException"},
    {"shape":"RateLimitExceededException"}
  ]
},
"ListFailuresForLicenseConfigurationOperations":{
  "name":"ListFailuresForLicenseConfigurationOperations",

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"http":{
  "method":"POST",
  "requestUri":"/"
},
"input":{"shape":"ListFailuresForLicenseConfigurationOperationsRequest"},
"output":{"shape":"ListFailuresForLicenseConfigurationOperationsResponse"},
"errors":[
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  {"shape":"ServerInternalException"},
  {"shape":"AuthorizationException"},
  {"shape":"AccessDeniedException"},
  {"shape":"RateLimitExceededException"}
]
},
>ListLicenseConfigurations:{
  "name":"ListLicenseConfigurations",
  "http":{
    "method":"POST",
    "requestUri":"/"
  },
  "input":{"shape":"ListLicenseConfigurationsRequest"},
  "output":{"shape":"ListLicenseConfigurationsResponse"},
  "errors":[
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    {"shape":"ServerInternalException"},
    {"shape":"FilterLimitExceededException"},
    {"shape":"AuthorizationException"},
    {"shape":"AccessDeniedException"},
    {"shape":"RateLimitExceededException"}
  ]
},
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  "http":{
    "method":"POST",
    "requestUri":"/"
  },
  "input":{"shape":"ListLicenseConversionTasksRequest"},
  "output":{"shape":"ListLicenseConversionTasksResponse"},
  "errors":[
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    {"shape":"ServerInternalException"},
    {"shape":"AuthorizationException"},
    {"shape":"AccessDeniedException"},
    {"shape":"RateLimitExceededException"}
  ]
},
>ListLicenseManagerReportGenerators:{

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  "method":"POST",
  "requestUri":"/"
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"input":{"shape":"ListLicenseManagerReportGeneratorsRequest"},
"output":{"shape":"ListLicenseManagerReportGeneratorsResponse"},
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  {"shape":"InvalidParameterValueException"},
  {"shape":"ResourceLimitExceededException"},
  {"shape":"ServerInternalException"},
  {"shape":"AuthorizationException"},
  {"shape":"RateLimitExceededException"},
  {"shape":"AccessDeniedException"},
  {"shape":"ResourceNotFoundException"}
]
},
>ListLicenseSpecificationsForResource":{"
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"http":{"
  "method":"POST",
  "requestUri":"/"
},
"input":{"shape":"ListLicenseSpecificationsForResourceRequest"},
"output":{"shape":"ListLicenseSpecificationsForResourceResponse"},
"errors":[
  {"shape":"InvalidParameterValueException"},
  {"shape":"ServerInternalException"},
  {"shape":"AuthorizationException"},
  {"shape":"AccessDeniedException"},
  {"shape":"RateLimitExceededException"}
]
},
>ListLicenseVersions":{"
"name":"ListLicenseVersions",
"http":{"
  "method":"POST",
  "requestUri":"/"
},
"input":{"shape":"ListLicenseVersionsRequest"},
"output":{"shape":"ListLicenseVersionsResponse"},
"errors":[
  {"shape":"InvalidParameterValueException"},
  {"shape":"AuthorizationException"},
  {"shape":"AccessDeniedException"},
  {"shape":"RateLimitExceededException"},
  {"shape":"ServerInternalException"}
]
}

```

```

]
},
"ListLicenses":{
  "name":"ListLicenses",
  "http":{
    "method":"POST",
    "requestUri":"/"
  },
  "input":{"shape":"ListLicensesRequest"},
  "output":{"shape":"ListLicensesResponse"},
  "errors":[
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    {"shape":"InvalidParameterValueException"},
    {"shape":"AuthorizationException"},
    {"shape":"AccessDeniedException"},
    {"shape":"RateLimitExceededException"},
    {"shape":"ServerInternalException"}
  ]
},
"ListReceivedGrants":{
  "name":"ListReceivedGrants",
  "http":{
    "method":"POST",
    "requestUri":"/"
  },
  "input":{"shape":"ListReceivedGrantsRequest"},
  "output":{"shape":"ListReceivedGrantsResponse"},
  "errors":[
    {"shape":"ValidationException"},
    {"shape":"InvalidParameterValueException"},
    {"shape":"ResourceLimitExceededException"},
    {"shape":"ServerInternalException"},
    {"shape":"AuthorizationException"},
    {"shape":"AccessDeniedException"},
    {"shape":"RateLimitExceededException"}
  ]
},
"ListReceivedGrantsForOrganization":{
  "name":"ListReceivedGrantsForOrganization",
  "http":{
    "method":"POST",
    "requestUri":"/"
  },
  "input":{"shape":"ListReceivedGrantsForOrganizationRequest"},
  "output":{"shape":"ListReceivedGrantsForOrganizationResponse"},
  "errors":[
    {"shape":"ValidationException"},

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```

    {"shape":"InvalidParameterValueException"},
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    {"shape":"ServerInternalException"},
    {"shape":"AuthorizationException"},
    {"shape":"AccessDeniedException"},
    {"shape":"RateLimitExceededException"}
  ]
},
"ListReceivedLicenses":{
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  "http":{
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    "requestUri":"/"
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  "input":{"shape":"ListReceivedLicensesRequest"},
  "output":{"shape":"ListReceivedLicensesResponse"},
  "errors":[
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    {"shape":"InvalidParameterValueException"},
    {"shape":"ResourceLimitExceededException"},
    {"shape":"ServerInternalException"},
    {"shape":"AuthorizationException"},
    {"shape":"AccessDeniedException"},
    {"shape":"RateLimitExceededException"}
  ]
},
"ListReceivedLicensesForOrganization":{
  "name":"ListReceivedLicensesForOrganization",
  "http":{
    "method":"POST",
    "requestUri":"/"
  },
  "input":{"shape":"ListReceivedLicensesForOrganizationRequest"},
  "output":{"shape":"ListReceivedLicensesForOrganizationResponse"},
  "errors":[
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    {"shape":"InvalidParameterValueException"},
    {"shape":"ResourceLimitExceededException"},
    {"shape":"ServerInternalException"},
    {"shape":"AuthorizationException"},
    {"shape":"AccessDeniedException"},
    {"shape":"RateLimitExceededException"}
  ]
},
"ListResourceInventory":{
  "name":"ListResourceInventory",
  "http":{
    "method":"POST",

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    "requestUri":"/"
  },
  "input":{"shape":"ListResourceInventoryRequest"},
  "output":{"shape":"ListResourceInventoryResponse"},
  "errors":[
    {"shape":"InvalidParameterValueException"},
    {"shape":"ServerInternalException"},
    {"shape":"FilterLimitExceededException"},
    {"shape":"FailedDependencyException"},
    {"shape":"AuthorizationException"},
    {"shape":"AccessDeniedException"},
    {"shape":"RateLimitExceededException"}
  ]
},
"ListTagsForResource":{
  "name":"ListTagsForResource",
  "http":{
    "method":"POST",
    "requestUri":"/"
  },
  "input":{"shape":"ListTagsForResourceRequest"},
  "output":{"shape":"ListTagsForResourceResponse"},
  "errors":[
    {"shape":"InvalidParameterValueException"},
    {"shape":"ServerInternalException"},
    {"shape":"AuthorizationException"},
    {"shape":"AccessDeniedException"},
    {"shape":"RateLimitExceededException"}
  ]
},
"ListTokens":{
  "name":"ListTokens",
  "http":{
    "method":"POST",

"requestUri":"/"
  },
  "input":{"shape":"ListTokensRequest"},
  "output":{"shape":"ListTokensResponse"},
  "errors":[
    {"shape":"ValidationException"},
    {"shape":"AuthorizationException"},
    {"shape":"AccessDeniedException"},
    {"shape":"RateLimitExceededException"},
    {"shape":"ServerInternalException"}
  ]
},
"ListUsageForLicenseConfiguration":{

```



```

"name":"ListUsageForLicenseConfiguration",
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  "method":"POST",
  "requestUri":"/"
},
"input":{"shape":"ListUsageForLicenseConfigurationRequest"},
"output":{"shape":"ListUsageForLicenseConfigurationResponse"},
"errors":[
  {"shape":"InvalidParameterValueException"},
  {"shape":"FilterLimitExceededException"},
  {"shape":"ServerInternalException"},
  {"shape":"AuthorizationException"},
  {"shape":"AccessDeniedException"},
  {"shape":"RateLimitExceededException"}
]
},
"RejectGrant":{
  "name":"RejectGrant",
  "http":{
    "method":"POST",
    "requestUri":"/"
  },
  "input":{"shape":"RejectGrantRequest"},
  "output":{"shape":"RejectGrantResponse"},
  "errors":[
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    {"shape":"InvalidParameterValueException"},
    {"shape":"AuthorizationException"},
    {"shape":"AccessDeniedException"},
    {"shape":"RateLimitExceededException"},
    {"shape":"ResourceLimitExceededException"},
    {"shape":"ServerInternalException"}
  ]
},
"TagResource":{
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  "http":{
    "method":"POST",
    "requestUri":"/"
  },
  "input":{"shape":"TagResourceRequest"},
  "output":{"shape":"TagResourceResponse"},
  "errors":[
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    {"shape":"ServerInternalException"},
    {"shape":"AuthorizationException"},
    {"shape":"AccessDeniedException"},
    {"shape":"RateLimitExceededException"}
  ]
}

```

```

]
},
"UntagResource":{
  "name":"UntagResource",
  "http":{
    "method":"POST",
    "requestUri":"/"
  },
  "input":{"shape":"UntagResourceRequest"},
  "output":{"shape":"UntagResourceResponse"},
  "errors":[
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    {"shape":"ServerInternalException"},
    {"shape":"AuthorizationException"},
    {"shape":"AccessDeniedException"},
    {"shape":"RateLimitExceededException"}
  ]
},
"UpdateLicenseConfiguration":{
  "name":"UpdateLicenseConfiguration",
  "http":{
    "method":"POST",
    "requestUri":"/"
  },
  "input":{"shape":"UpdateLicenseConfigurationRequest"},
  "output":{"shape":"UpdateLicenseConfigurationResponse"},
  "errors":[
    {"shape":"InvalidParameterValueException"},
    {"shape":"ServerInternalException"},
    {"shape":"AuthorizationException"},
    {"shape":"AccessDeniedException"},
    {"shape":"RateLimitExceededException"},
    {"shape":"ResourceLimitExceededException"}
  ]
},
"UpdateLicenseManagerReportGenerator":{
  "name":"UpdateLicenseManagerReportGenerator",
  "http":{
    "method":"POST",
    "requestUri":"/"
  },
  "input":{"shape":"UpdateLicenseManagerReportGeneratorRequest"},
  "output":{"shape":"UpdateLicenseManagerReportGeneratorResponse"},
  "errors":[
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    {"shape":"InvalidParameterValueException"},
    {"shape":"RateLimitExceededException"},
    {"shape":"ServerInternalException"},

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    {"shape":"AuthorizationException"},
    {"shape":"AccessDeniedException"},
    {"shape":"ResourceNotFoundException"},
    {"shape":"ResourceLimitExceededException"}
  ]
},
"UpdateLicenseSpecificationsForResource":{
  "name":"UpdateLicenseSpecificationsForResource",
  "http":{
    "method":"POST",
    "requestUri":"/"
  },
  "input":{"shape":"UpdateLicenseSpecificationsForResourceRequest"},
  "output":{"shape":"UpdateLicenseSpecificationsForResourceResponse"},
  "errors":[
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    {"shape":"InvalidResourceStateException"},
    {"shape":"LicenseUsageException"},
    {"shape":"ServerInternalException"},
    {"shape":"AuthorizationException"},
    {"shape":"AccessDeniedException"},
    {"shape":"RateLimitExceededException"}
  ]
},
"UpdateServiceSettings":{
  "name":"UpdateServiceSettings",
  "http":{
    "method":"POST",
    "requestUri":"/"
  },
  "input":{"shape":"UpdateServiceSettingsRequest"},
  "output":{"shape":"UpdateServiceSettingsResponse"},
  "errors":[
    {"shape":"InvalidParameterValueException"},
    {"shape":"ServerInternalException"},
    {"shape":"AuthorizationException"},
    {"shape":"AccessDeniedException"},
    {"shape":"RateLimitExceededException"}
  ]
}
},
"shapes":{
  "AcceptGrantRequest":{
    "type":"structure",
    "required":["GrantArn"],
    "members":{
      "GrantArn":{"shape":"Arn"}
    }
  }
}

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    }
  },
  "AcceptGrantResponse":{
    "type":"structure",
    "members":{
      "GrantArn":{"shape":"Arn"},
      "Status":{"shape":"GrantStatus"},
      "Version":{"shape":"String"}
    }
  },
  "AccessDeniedException":{
    "type":"structure",
    "members":{
      "Message":{"shape":"Message"}
    },
    "exception":true
  },
  "ActivationOverrideBehavior":{
    "type":"string",
    "enum":[
      "DISTRIBUTED_GRANTS_ONLY",
      "ALL_GRANTS_PERMITTED_BY_ISSUER"
    ]
  },
  "AllowedOperation":{
    "type":"string",
    "enum":[
      "CreateGrant",
      "CheckoutLicense",
      "CheckoutBorrowLicense",
      "CheckInLicense",
      "ExtendConsumptionLicense",
      "ListPurchasedLicenses",
      "CreateToken"
    ]
  },
  "AllowedOperationList":{
    "type":"list",
    "member":{"shape":"AllowedOperation"},
    "max":7,
    "min":1
  },
  "Arn":{
    "type":"string",
    "max":2048,
    "pattern":"^arn:aws(-(cn|us-gov|iso-b|iso-c|iso-d))?:[A-Za-z0-9][A-Za-z0-9_/.-]{0,62}:[A-Za-z0-9_/.-]{0,63}:[A-
Za-z0-9_/.-]{0,63}:[A-Za-z0-9][A-Za-z0-9:/+,@.-]{0,1023}$"
  },

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```

"ArnList":{
  "type":"list",
  "member":{"shape":"Arn"}
},
"AuthorizationException":{
  "type":"structure",
  "members":{
    "Message":{"shape":"Message"}
  },
  "exception":true
},
"AutomatedDiscoveryInformation":{
  "type":"structure",
  "members":{
    "LastRunTime":{"shape":"DateTime"}
  }
},
"Boolean":{"type":"boolean"},
"BorrowConfiguration":{
  "type":"structure",
  "required":[
    "AllowEarlyCheckIn",
    "MaxTimeToLiveInMinutes"
  ],
  "members":{
    "AllowEarlyCheckIn":{"shape":"BoxBoolean"},
    "MaxTimeToLiveInMinutes":{"shape":"BoxInteger"}
  }
},
"BoxBoolean":{"type":"boolean"},
"BoxInteger":{"type":"integer"},
"BoxLong":{"type":"long"},
"CheckInLicenseRequest":{
  "type":"structure",
  "required":["LicenseConsumptionToken"],
  "members":{
    "LicenseConsumptionToken":{"shape":"String"},
    "Beneficiary":{"shape":"String"}
  }
},
"CheckInLicenseResponse":{
  "type":"structure",
  "members":{
  }
},
"CheckoutBorrowLicenseRequest":{
  "type":"structure",
  "required":[

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    "LicenseArn",
    "Entitlements",
    "DigitalSignatureMethod",
    "ClientToken"
  ],
  "members":{
    "LicenseArn":{"shape":"Arn"},
    "Entitlements":{"shape":"EntitlementDataList"},
    "DigitalSignatureMethod":{"shape":"DigitalSignatureMethod"},
    "NodeId":{"shape":"String"},
    "CheckoutMetadata":{"shape":"MetadataList"},
    "ClientToken":{"shape":"ClientToken"}
  }
},

"CheckoutBorrowLicenseResponse":{
  "type":"structure",
  "members":{
    "LicenseArn":{"shape":"Arn"},
    "LicenseConsumptionToken":{"shape":"String"},
    "EntitlementsAllowed":{"shape":"EntitlementDataList"},
    "NodeId":{"shape":"String"},
    "SignedToken":{"shape":"SignedToken"},
    "IssuedAt":{"shape":"ISO8601DateTime"},
    "Expiration":{"shape":"ISO8601DateTime"},
    "CheckoutMetadata":{"shape":"MetadataList"}
  }
},

"CheckoutLicenseRequest":{
  "type":"structure",
  "required":[
    "ProductSKU",
    "CheckoutType",
    "KeyFingerprint",
    "Entitlements",
    "ClientToken"
  ],
  "members":{
    "ProductSKU":{"shape":"String"},
    "CheckoutType":{"shape":"CheckoutType"},
    "KeyFingerprint":{"shape":"String"},
    "Entitlements":{"shape":"EntitlementDataList"},
    "ClientToken":{"shape":"ClientToken"},
    "Beneficiary":{"shape":"String"},
    "NodeId":{"shape":"String"}
  }
},

"CheckoutLicenseResponse":{

```

```

"type":"structure",
"members":{
  "CheckoutType":{"shape":"CheckoutType"},
  "LicenseConsumptionToken":{"shape":"String"},
  "EntitlementsAllowed":{"shape":"EntitlementDataList"},
  "SignedToken":{"shape":"SignedToken"},
  "NodeId":{"shape":"String"},
  "IssuedAt":{"shape":"ISO8601DateTime"},
  "Expiration":{"shape":"ISO8601DateTime"},
  "LicenseArn":{"shape":"String"}
}
},
"CheckoutType":{
  "type":"string",
  "enum":[
    "PROVISIONAL",
    "PERPETUAL"
  ]
},
"ClientRequestToken":{
  "type":"string",
  "max":36,
  "min":1
},
"ClientToken":{
  "type":"string",
  "max":2048,
  "pattern":"\\S+"
},
"ConflictException":{
  "type":"structure",
  "members":{
    "Message":{"shape":"Message"}
  },
  "exception":true
},
"ConsumedLicenseSummary":{
  "type":"structure",
  "members":{
    "ResourceType":{"shape":"ResourceType"},
    "ConsumedLicenses":{"shape":"BoxLong"}
  }
},
"ConsumedLicenseSummaryList":{
  "type":"list",
  "member":{"shape":"ConsumedLicenseSummary"}
},
"ConsumptionConfiguration":{

```

```

"type":"structure",
"members":{
  "RenewType":{"shape":"RenewType"},
  "ProvisionalConfiguration":{"shape":"ProvisionalConfiguration"},
  "BorrowConfiguration":{"shape":"BorrowConfiguration"}
}
},
"CreateGrantRequest":{
"type":"structure",
"required":[
  "ClientToken",
  "GrantName",
  "LicenseArn",
  "Principals",
  "HomeRegion",
  "AllowedOperations"
],
"members":{
  "ClientToken":{"shape":"ClientToken"},
  "GrantName":{"shape":"String"},
  "LicenseArn":{"shape":"Arn"},
  "Principals":{"shape":"PrincipalArnList"},
  "HomeRegion":{"shape":"String"},
  "AllowedOperations":{"shape":"AllowedOperationList"}
}
},
"CreateGrantResponse":{
"type":"structure",
"members":{
  "GrantArn":{"shape":"Arn"},
  "Status":{"shape":"GrantStatus"},
  "Version":{"shape":"String"}
}
},
"CreateGrantVersionRequest":{
"type":"structure",
"required":[
  "ClientToken",
  "GrantArn"
],
"members":{
  "ClientToken":{"shape":"ClientToken"},
  "GrantArn":{"shape":"Arn"},
  "GrantName":{"shape":"String"},
  "AllowedOperations":{"shape":"AllowedOperationList"},
  "Status":{"shape":"GrantStatus"},
  "StatusReason":{"shape":"StatusReasonMessage"},
  "SourceVersion":{"shape":"String"},

```



```

    "Options":{"shape":"Options"}
  }
},
"CreateGrantVersionResponse":{"
  "type":"structure",
  "members":{"
    "GrantArn":{"shape":"Arn"},
    "Status":{"shape":"GrantStatus"},
    "Version":{"shape":"String"}
  }
},
"CreateLicenseConfigurationRequest":{"
  "type":"structure",
  "required":[
    "Name",
    "LicenseCountingType"
  ],
  "members":{"
    "Name":{"shape":"String"},
    "Description":{"shape":"String"},
    "LicenseCountingType":{"shape":"LicenseCountingType"},
    "LicenseCount":{"shape":"BoxLong"},
    "LicenseCountHardLimit":{"shape":"BoxBoolean"},
    "LicenseRules":{"shape":"StringList"},
    "Tags":{"shape":"TagList"},
    "DisassociateWhenNotFound":{"shape":"BoxBoolean"},
    "ProductInformationList":{"shape":"ProductInformationList"}
  }
},
"CreateLicenseConfigurationResponse":{"
  "type":"structure",
  "members":{"
    "LicenseConfigurationArn":{"shape":"String"}
  }
},
"CreateLicenseConversionTaskForResourceRequest":{"
  "type":"structure",
  "required":[
    "ResourceArn",
    "SourceLicenseContext",
    "DestinationLicenseContext"
  ],
  "members":{"
    "ResourceArn":{"shape":"Arn"},
    "SourceLicenseContext":{"shape":"LicenseConversionContext"},
    "DestinationLicenseContext":{"shape":"LicenseConversionContext"}
  }
},

```

```

"CreateLicenseConversionTaskForResourceResponse":{
  "type":"structure",
  "members":{
    "LicenseConversionTaskId":{"shape":"LicenseConversionTaskId"}
  }
},
"CreateLicenseManagerReportGeneratorRequest":{
  "type":"structure",
  "required":[
    "ReportGeneratorName",
    "Type",
    "ReportContext",
    "ReportFrequency",
    "ClientToken"
  ],
  "members":{
    "ReportGeneratorName":{"shape":"ReportGeneratorName"},
    "Type":{"shape":"ReportTypeList"},
    "ReportContext":{"shape":"ReportContext"},
    "ReportFrequency":{"shape":"ReportFrequency"},
    "ClientToken":{"shape":"ClientRequestToken"},
    "Description":{"shape":"String"},
    "Tags":{"shape":"TagList"}
  }
},
"CreateLicenseManagerReportGeneratorResponse":{
  "type":"structure",
  "members":{
    "LicenseManagerReportGeneratorArn":{"shape":"String"}
  }
},
"CreateLicenseRequest":{
  "type":"structure",
  "required":[
    "LicenseName",
    "ProductName",
    "ProductSKU",
    "Issuer",
    "HomeRegion",
    "Validity",
    "Entitlements",
    "Beneficiary",
    "ConsumptionConfiguration",
    "ClientToken"
  ],
  "members":{
    "LicenseName":{"shape":"String"},
    "ProductName":{"shape":"String"},

```

```

    "ProductSKU":{"shape":"String"},
    "Issuer":{"shape":"Issuer"},
    "HomeRegion":{"shape":"String"},
    "Validity":{"shape":"DatetimeRange"},
    "Entitlements":{"shape":"EntitlementList"},
    "Beneficiary":{"shape":"String"},
    "ConsumptionConfiguration":{"shape":"ConsumptionConfiguration"},
    "LicenseMetadata":{"shape":"MetadataList"},
    "ClientToken":{"shape":"ClientToken"}
}
},
"CreateLicenseResponse":{
  "type":"structure",
  "members":{
    "LicenseArn":{"shape":"Arn"},
    "Status":{"shape":"LicenseStatus"},
    "Version":{"shape":"String"}
  }
},
"CreateLicenseVersionRequest":{
  "type":"structure",
  "required":[
    "LicenseArn",
    "LicenseName",
    "ProductName",
    "Issuer",
    "HomeRegion",
    "Validity",
    "Entitlements",
    "ConsumptionConfiguration",
    "Status",
    "ClientToken"
  ],
  "members":{
    "LicenseArn":{"shape":"Arn"},
    "LicenseName":{"shape":"String"},
    "ProductName":{"shape":"String"},
    "Issuer":{"shape":"Issuer"},
    "HomeRegion":{"shape":"String"},
    "Validity":{"shape":"DatetimeRange"},
    "LicenseMetadata":{"shape":"MetadataList"},
    "Entitlements":{"shape":"EntitlementList"},
    "ConsumptionConfiguration":{"shape":"ConsumptionConfiguration"},
    "Status":{"shape":"LicenseStatus"},
    "ClientToken":{"shape":"ClientToken"},
    "SourceVersion":{"shape":"String"}
  }
}

```

```

},
"CreateLicenseVersionResponse":{
  "type":"structure",
  "members":{
    "LicenseArn":{"shape":"Arn"},
    "Version":{"shape":"String"},
    "Status":{"shape":"LicenseStatus"}
  }
},
"CreateTokenRequest":{
  "type":"structure",
  "required":[
    "LicenseArn",
    "ClientToken"
  ],
  "members":{
    "LicenseArn":{"shape":"Arn"},
    "RoleArns":{"shape":"ArnList"},
    "ExpirationInDays":{"shape":"Integer"},
    "TokenProperties":{"shape":"MaxSize3StringList"},
    "ClientToken":{"shape":"ClientToken"}
  }
},
"CreateTokenResponse":{
  "type":"structure",
  "members":{
    "TokenId":{"shape":"String"},
    "TokenType":{"shape":"TokenType"},
    "Token":{"shape":"TokenString"}
  }
},
"DateTime":{"type":"timestamp"},
"DatetimeRange":{"
  "type":"structure",
  "required":["Begin"],
  "members":{
    "Begin":{"shape":"ISO8601DateTime"},
    "End":{"shape":"ISO8601DateTime"}
  }
},
"DeleteGrantRequest":{
  "type":"structure",
  "required":[
    "GrantArn",
    "Version"
  ],
  "members":{

```

```

    "GrantArn":{"shape":"Arn"},
    "StatusReason":{"shape":"StatusReasonMessage"},
    "Version":{"shape":"String"}
  }
},
"DeleteGrantResponse":{"
  "type":"structure",
  "members":{"
    "GrantArn":{"shape":"Arn"},
    "Status":{"shape":"GrantStatus"},
    "Version":{"shape":"String"}
  }
},
"DeleteLicenseConfigurationRequest":{"
  "type":"structure",
  "required":["LicenseConfigurationArn"],
  "members":{"
    "LicenseConfigurationArn":{"shape":"String"}
  }
},
"DeleteLicenseConfigurationResponse":{"
  "type":"structure",
  "members":{"
  }
},
"DeleteLicenseManagerReportGeneratorRequest":{"
  "type":"structure",
  "required":["LicenseManagerReportGeneratorArn"],
  "members":{"
    "LicenseManagerReportGeneratorArn":{"shape":"String"}
  }
},
"DeleteLicenseManagerReportGeneratorResponse":{"
  "type":"structure",
  "members":{"
  }
},
"DeleteLicenseRequest":{"
  "type":"structure",
  "required":[
    "LicenseArn",
    "SourceVersion"
  ],
  "members":{"
    "LicenseArn":{"shape":"Arn"},
    "SourceVersion":{"shape":"String"}
  }
},

```

```

"DeleteLicenseResponse":{
  "type":"structure",
  "members":{
    "Status":{"shape":"LicenseDeletionStatus"},
    "DeletionDate":{"shape":"ISO8601DateTime"}
  }
},
"DeleteTokenRequest":{
  "type":"structure",
  "required":["TokenId"],
  "members":{
    "TokenId":{"shape":"String"}
  }
},
"DeleteTokenResponse":{
  "type":"structure",
  "members":{
  }
},
"DigitalSignatureMethod":{
  "type":"string",
  "enum":["JWT_PS384"]
},
"Entitlement":{
  "type":"structure",
  "required":[
    "Name",
    "Unit"
  ],
  "members":{
    "Name":{"shape":"String"},
    "Value":{"shape":"String"},
    "MaxCount":{"shape":"Long"},
    "Overage":{"shape":"BoxBoolean"},
    "Unit":{"shape":"EntitlementUnit"},
    "AllowCheckIn":{"shape":"BoxBoolean"}
  }
},
"EntitlementData":{
  "type":"structure",
  "required":[
    "Name",
    "Unit"
  ],
  "members":{
    "Name":{"shape":"String"},
    "Value":{"shape":"String"},

```

```

    "Unit":{"shape":"EntitlementDataUnit"}
  }
},
"EntitlementDataList":{"
  "type":"list",
  "member":{"shape":"EntitlementData"}
},
"EntitlementDataUnit":{"
  "type":"string",
  "enum":[
    "Count",
    "None",
    "Seconds",
    "Microseconds",
    "Milliseconds",
    "Bytes",
    "Kilobytes",

    "Megabytes",
    "Gigabytes",
    "Terabytes",
    "Bits",
    "Kilobits",
    "Megabits",
    "Gigabits",
    "Terabits",
    "Percent",
    "Bytes/Second",
    "Kilobytes/Second",
    "Megabytes/Second",
    "Gigabytes/Second",
    "Terabytes/Second",
    "Bits/Second",
    "Kilobits/Second",
    "Megabits/Second",
    "Gigabits/Second",
    "Terabits/Second",
    "Count/Second"
  ]
},
"EntitlementList":{"
  "type":"list",
  "member":{"shape":"Entitlement"}
},
"EntitlementNotAllowedException":{"
  "type":"structure",
  "members":{"
    "Message":{"shape":"Message"}
  }
}

```

```

    },
    "exception":true
  },
  "EntitlementUnit":{
    "type":"string",
    "enum":[
      "Count",
      "None",
      "Seconds",
      "Microseconds",
      "Milliseconds",
      "Bytes",
      "Kilobytes",
      "Megabytes",
      "Gigabytes",
      "Terabytes",

      "Bits",
      "Kilobits",
      "Megabits",
      "Gigabits",
      "Terabits",
      "Percent",
      "Bytes/Second",
      "Kilobytes/Second",
      "Megabytes/Second",
      "Gigabytes/Second",
      "Terabytes/Second",
      "Bits/Second",
      "Kilobits/Second",
      "Megabits/Second",
      "Gigabits/Second",
      "Terabits/Second",
      "Count/Second"
    ]
  },
  "EntitlementUsage":{
    "type":"structure",
    "required":[
      "Name",
      "ConsumedValue",
      "Unit"
    ],
    "members":{
      "Name":{"shape":"String"},
      "ConsumedValue":{"shape":"String"},
      "MaxCount":{"shape":"String"},
      "Unit":{"shape":"EntitlementDataUnit"}
    }
  }
}

```



```

    }
  },
  "EntitlementUsageList":{
    "type":"list",
    "member":{"shape":"EntitlementUsage"}
  },
  "ExtendLicenseConsumptionRequest":{
    "type":"structure",
    "required":["LicenseConsumptionToken"],
    "members":{
      "LicenseConsumptionToken":{"shape":"String"},
      "DryRun":{"shape":"Boolean"}
    }
  },
  "ExtendLicenseConsumptionResponse":{
    "type":"structure",
    "members":{
      "LicenseConsumptionToken":{"shape":"String"},
      "Expiration":{"shape":"ISO8601DateTime"}
    }
  },
  "FailedDependencyException":{
    "type":"structure",
    "members":{
      "Message":{"shape":"Message"},
      "ErrorCode":{"shape":"String"}
    },
    "exception":true
  },
  "Filter":{
    "type":"structure",
    "members":{
      "Name":{"shape":"FilterName"},
      "Values":{"shape":"FilterValues"}
    }
  },
  "FilterLimitExceededException":{
    "type":"structure",
    "members":{
      "Message":{"shape":"Message"}
    },
    "exception":true
  },
  "FilterList":{
    "type":"list",
    "member":{"shape":"Filter"}
  },
  "FilterName":{"type":"string"},

```

```

"FilterValue":{"type":"string"},
"FilterValues":{
  "type":"list",
  "member":{"shape":"FilterValue"}
},
"Filters":{
  "type":"list",
  "member":{"shape":"Filter"}
},
"GetAccessTokenRequest":{
  "type":"structure",
  "required":["Token"],
  "members":{
    "Token":{"shape":"TokenString"},
    "TokenProperties":{"shape":"MaxSize3StringList"}
  }
},
"GetAccessTokenResponse":{
  "type":"structure",
  "members":{
    "AccessToken":{"shape":"TokenString"}
  }
},
"GetGrantRequest":{
  "type":"structure",
  "required":["GrantArn"],
  "members":{
    "GrantArn":{"shape":"Arn"},
    "Version":{"shape":"String"}
  }
},
"GetGrantResponse":{
  "type":"structure",
  "members":{
    "Grant":{"shape":"Grant"}
  }
},
"GetLicenseConfigurationRequest":{
  "type":"structure",
  "required":["LicenseConfigurationArn"],
  "members":{
    "LicenseConfigurationArn":{"shape":"String"}
  }
},
"GetLicenseConfigurationResponse":{
  "type":"structure",
  "members":{
    "LicenseConfigurationId":{"shape":"String"},

```

```

"LicenseConfigurationArn":{"shape":"String"},
"Name":{"shape":"String"},
"Description":{"shape":"String"},
"LicenseCountingType":{"shape":"LicenseCountingType"},
"LicenseRules":{"shape":"StringList"},
"LicenseCount":{"shape":"BoxLong"},
"LicenseCountHardLimit":{"shape":"BoxBoolean"},
"ConsumedLicenses":{"shape":"BoxLong"},
"Status":{"shape":"String"},
"OwnerAccountId":{"shape":"String"},
"ConsumedLicenseSummaryList":{"shape":"ConsumedLicenseSummaryList"},
"ManagedResourceSummaryList":{"shape":"ManagedResourceSummaryList"},
"Tags":{"shape":"TagList"},
"ProductInformationList":{"shape":"ProductInformationList"},
"AutomatedDiscoveryInformation":{"shape":"AutomatedDiscoveryInformation"},
"DisassociateWhenNotFound":{"shape":"BoxBoolean"}
}
},
"GetLicenseConversionTaskRequest":{"
  "type":"structure",
  "required":["LicenseConversionTaskId"],
  "members":{"
    "LicenseConversionTaskId":{"shape":"LicenseConversionTaskId"}
  }
},
"GetLicenseConversionTaskResponse":{"
  "type":"structure",
  "members":{"
    "LicenseConversionTaskId":{"shape":"LicenseConversionTaskId"},
    "ResourceArn":{"shape":"String"},
    "SourceLicenseContext":{"shape":"LicenseConversionContext"},
    "DestinationLicenseContext":{"shape":"LicenseConversionContext"},
    "StatusMessage":{"shape":"String"},
    "Status":{"shape":"LicenseConversionTaskStatus"},
    "StartTime":{"shape":"DateTime"},
    "LicenseConversionTime":{"shape":"DateTime"},
    "EndTime":{"shape":"DateTime"}
  }
},
"GetLicenseManagerReportGeneratorRequest":{"
  "type":"structure",
  "required":["LicenseManagerReportGeneratorArn"],
  "members":{"
    "LicenseManagerReportGeneratorArn":{"shape":"String"}
  }
},
"GetLicenseManagerReportGeneratorResponse":{"
  "type":"structure",

```

```

"members":{
  "ReportGenerator":{"shape":"ReportGenerator"}
}
},
"GetLicenseRequest":{
  "type":"structure",
  "required":["LicenseArn"],
  "members":{
    "LicenseArn":{"shape":"Arn"},
    "Version":{"shape":"String"}
  }
},
"GetLicenseResponse":{
  "type":"structure",
  "members":{
    "License":{"shape":"License"}
  }
},
"GetLicenseUsageRequest":{
  "type":"structure",
  "required":["LicenseArn"],
  "members":{
    "LicenseArn":{"shape":"Arn"}
  }
},
"GetLicenseUsageResponse":{
  "type":"structure",
  "members":{
    "LicenseUsage":{"shape":"LicenseUsage"}
  }
},
"GetServiceSettingsRequest":{
  "type":"structure",
  "members":{
  }
},
"GetServiceSettingsResponse":{
  "type":"structure",
  "members":{
    "S3BucketArn":{"shape":"String"},
    "SnsTopicArn":{"shape":"String"},
    "OrganizationConfiguration":{"shape":"OrganizationConfiguration"},
    "EnableCrossAccountsDiscovery":{"shape":"BoxBoolean"},
    "LicenseManagerResourceShareArn":{"shape":"String"}
  }
},
"Grant":{
  "type":"structure",

```

```

"required":[
  "GrantArn",
  "GrantName",
  "ParentArn",
  "LicenseArn",
  "GranteePrincipalArn",
  "HomeRegion",
  "GrantStatus",
  "Version",
  "GrantedOperations"
],
"members":{
  "GrantArn":{"shape":"Arn"},
  "GrantName":{"shape":"String"},
  "ParentArn":{"shape":"Arn"},
  "LicenseArn":{"shape":"Arn"},
  "GranteePrincipalArn":{"shape":"Arn"},
  "HomeRegion":{"shape":"String"},
  "GrantStatus":{"shape":"GrantStatus"},
  "StatusReason":{"shape":"StatusReasonMessage"},
  "Version":{"shape":"String"},
  "GrantedOperations":{"shape":"AllowedOperationList"},
  "Options":{"shape":"Options"}
}
},
"GrantList":{
  "type":"list",
  "member":{"shape":"Grant"}
},
"GrantStatus":{
  "type":"string",
  "enum":[
    "PENDING_WORKFLOW",
    "PENDING_ACCEPT",
    "REJECTED",
    "ACTIVE",
    "FAILED_WORKFLOW",
    "DELETED",
    "PENDING_DELETE",
    "DISABLED",
    "WORKFLOW_COMPLETED"
  ]
},
"GrantedLicense":{
  "type":"structure",
  "members":{
    "LicenseArn":{"shape":"Arn"},
    "LicenseName":{"shape":"String"},

```

```

    "ProductName":{"shape":"String"},
    "ProductSKU":{"shape":"String"},
    "Issuer":{"shape":"IssuerDetails"},
    "HomeRegion":{"shape":"String"},
    "Status":{"shape":"LicenseStatus"},
    "Validity":{"shape":"DatetimeRange"},
    "Beneficiary":{"shape":"String"},
    "Entitlements":{"shape":"EntitlementList"},
    "ConsumptionConfiguration":{"shape":"ConsumptionConfiguration"},

    "LicenseMetadata":{"shape":"MetadataList"},
    "CreateTime":{"shape":"ISO8601DateTime"},
    "Version":{"shape":"String"},
    "ReceivedMetadata":{"shape":"ReceivedMetadata"}
  }
},
"GrantedLicenseList":{
  "type":"list",
  "member":{"shape":"GrantedLicense"}
},
"ISO8601DateTime":{
  "type":"string",
  "max":50,
  "pattern":"^(?:(?:[1-9][0-9]*)?0[0-9]{4})-(1[0-2]|0[1-9])-(3[0-1]|0[1-9]||1-2)[0-9]T(2[0-3]||[0-1][0-9]):(?:[0-5][0-9]):(?:[0-5][0-9])(\\.[0-9]+)?(?:Z|[+](?:2[ 0-3]||[0-1][0-9]):[0-5][0-9])+$"
},
"Integer":{"type":"integer"},
"InvalidParameterValueException":{
  "type":"structure",
  "members":{
    "Message":{"shape":"Message"}
  },
  "exception":true,
  "synthetic":true
},
"InvalidResourceStateException":{
  "type":"structure",
  "members":{
    "Message":{"shape":"Message"}
  },
  "exception":true
},
"InventoryFilter":{
  "type":"structure",
  "required":[
    "Name",
    "Condition"
  ],

```

```

"members":{
  "Name":{"shape":"String"},
  "Condition":{"shape":"InventoryFilterCondition"},
  "Value":{"shape":"String"}
}
},
"InventoryFilterCondition":{
  "type":"string",
  "enum":[
    "EQUALS",
    "NOT_EQUALS",
    "BEGINS_WITH",
    "CONTAINS"
  ]
},
"InventoryFilterList":{
  "type":"list",
  "member":{"shape":"InventoryFilter"}
},
"Issuer":{
  "type":"structure",
  "required":["Name"],
  "members":{
    "Name":{"shape":"String"},
    "SignKey":{"shape":"String"}
  }
},
"IssuerDetails":{
  "type":"structure",
  "members":{
    "Name":{"shape":"String"},
    "SignKey":{"shape":"String"},
    "KeyFingerprint":{"shape":"String"}
  }
},
"License":{
  "type":"structure",
  "members":{
    "LicenseArn":{"shape":"Arn"},
    "LicenseName":{"shape":"String"},
    "ProductName":{"shape":"String"},
    "ProductSKU":{"shape":"String"},
    "Issuer":{"shape":"IssuerDetails"},
    "HomeRegion":{"shape":"String"},
    "Status":{"shape":"LicenseStatus"},
    "Validity":{"shape":"DatetimeRange"},
    "Beneficiary":{"shape":"String"},

```

```

"Entitlements":{"shape":"EntitlementList"},
"ConsumptionConfiguration":{"shape":"ConsumptionConfiguration"},
"LicenseMetadata":{"shape":"MetadataList"},
"CreateTime":{"shape":"ISO8601DateTime"},
"Version":{"shape":"String"}
}
},
"LicenseConfiguration":{
"type":"structure",
"members":{
"LicenseConfigurationId":{"shape":"String"},
"LicenseConfigurationArn":{"shape":"String"},
"Name":{"shape":"String"},
"Description":{"shape":"String"},
"LicenseCountingType":{"shape":"LicenseCountingType"},
"LicenseRules":{"shape":"StringList"},
"LicenseCount":{"shape":"BoxLong"},
"LicenseCountHardLimit":{"shape":"BoxBoolean"},
"DisassociateWhenNotFound":{"shape":"BoxBoolean"},
"ConsumedLicenses":{"shape":"BoxLong"},
"Status":{"shape":"String"},
"OwnerAccountId":{"shape":"String"},
"ConsumedLicenseSummaryList":{"shape":"ConsumedLicenseSummaryList"},
"ManagedResourceSummaryList":{"shape":"ManagedResourceSummaryList"},
"ProductInformationList":{"shape":"ProductInformationList"},
"AutomatedDiscoveryInformation":{"shape":"AutomatedDiscoveryInformation"}
}
},
"LicenseConfigurationAssociation":{
"type":"structure",
"members":{
"ResourceArn":{"shape":"String"},
"ResourceType":{"shape":"ResourceType"},
"ResourceOwnerId":{"shape":"String"},
"AssociationTime":{"shape":"DateTime"},
"AmiAssociationScope":{"shape":"String"}
}
},
"LicenseConfigurationAssociations":{
"type":"list",
"member":{"shape":"LicenseConfigurationAssociation"}
},
"LicenseConfigurationStatus":{
"type":"string",
"enum":[
"AVAILABLE",
"DISABLED"
]
}

```



```

},
"LicenseConfigurationUsage":{
  "type":"structure",
  "members":{
    "ResourceArn":{"shape":"String"},
    "ResourceType":{"shape":"ResourceType"},
    "ResourceStatus":{"shape":"String"},
    "ResourceOwnerId":{"shape":"String"},
    "AssociationTime":{"shape":"DateTime"},
    "ConsumedLicenses":{"shape":"BoxLong"}
  }
},
"LicenseConfigurationUsageList":{
  "type":"list",
  "member":{"shape":"LicenseConfigurationUsage"}
},
"LicenseConfigurations":{
  "type":"list",
  "member":{"shape":"LicenseConfiguration"}
},
"LicenseConversionContext":{
  "type":"structure",
  "members":{
    "UsageOperation":{"shape":"UsageOperation"}
  }
},
"LicenseConversionTask":{
  "type":"structure",
  "members":{
    "LicenseConversionTaskId":{"shape":"LicenseConversionTaskId"},
    "ResourceArn":{"shape":"String"},
    "SourceLicenseContext":{"shape":"LicenseConversionContext"},
    "DestinationLicenseContext":{"shape":"LicenseConversionContext"},
    "Status":{"shape":"LicenseConversionTaskStatus"},
    "StatusMessage":{"shape":"String"},
    "StartTime":{"shape":"DateTime"},
    "LicenseConversionTime":{"shape":"DateTime"},
    "EndTime":{"shape":"DateTime"}
  }
},
"LicenseConversionTaskId":{
  "type":"string",
  "max":50,
  "pattern":"^lct-[a-zA-Z0-9]*"
},
"LicenseConversionTaskStatus":{
  "type":"string",
  "enum":{

```

```

    "IN_PROGRESS",
    "SUCCEEDED",
    "FAILED"
  ]
},
"LicenseConversionTasks":{
  "type":"list",
  "member":{"shape":"LicenseConversionTask"}
},
"LicenseCountingType":{
  "type":"string",
  "enum":[
    "vCPU",
    "Instance",
    "Core",
    "Socket"
  ]
},
"LicenseDeletionStatus":{
  "type":"string",
  "enum":[
    "PENDING_DELETE",
    "DELETED"
  ]
},
"LicenseList":{
  "type":"list",
  "member":{"shape":"License"}
},
"LicenseOperationFailure":{
  "type":"structure",
  "members":{
    "ResourceArn":{"shape":"String"},
    "ResourceType":{"shape":"ResourceType"},
    "ErrorMessage":{"shape":"String"},
    "FailureTime":{"shape":"DateTime"},
    "OperationName":{"shape":"String"},
    "ResourceOwnerId":{"shape":"String"},
    "OperationRequestedBy":{"shape":"String"},
    "MetadataList":{"shape":"MetadataList"}
  }
},
"LicenseOperationFailureList":{
  "type":"list",
  "member":{"shape":"LicenseOperationFailure"}
},
"LicenseSpecification":{
  "type":"structure",

```

```

"required":["LicenseConfigurationArn"],
"members":{
  "LicenseConfigurationArn":{"shape":"String"},
  "AmiAssociationScope":{"shape":"String"}
}
},
"LicenseSpecifications":{
  "type":"list",
  "member":{"shape":"LicenseSpecification"}
},
"LicenseStatus":{
  "type":"string",
  "enum":[
    "AVAILABLE",
    "PENDING_AVAILABLE",
    "DEACTIVATED",
    "SUSPENDED",
    "EXPIRED",
    "PENDING_DELETE",
    "DELETED"
  ]
},
"LicenseUsage":{
  "type":"structure",
  "members":{
    "EntitlementUsages":{"shape":"EntitlementUsageList"}
  }
},
"LicenseUsageException":{
  "type":"structure",
  "members":{
    "Message":{"shape":"Message"}
  },
  "exception":true
},
"ListAssociationsForLicenseConfigurationRequest":{
  "type":"structure",
  "required":["LicenseConfigurationArn"],
  "members":{
    "LicenseConfigurationArn":{"shape":"String"},
    "MaxResults":{"shape":"BoxInteger"},
    "NextToken":{"shape":"String"}
  }
},
"ListAssociationsForLicenseConfigurationResponse":{
  "type":"structure",
  "members":{
    "LicenseConfigurationAssociations":{"shape":"LicenseConfigurationAssociations"},

```

```

    "NextToken":{"shape":"String"}
  }
},
"ListDistributedGrantsRequest":{
  "type":"structure",
  "members":{
    "GrantArns":{"shape":"ArnList"},
    "Filters":{"shape":"FilterList"},
    "NextToken":{"shape":"String"},
    "MaxResults":{"shape":"MaxSize100"}
  }
},
"ListDistributedGrantsResponse":{
  "type":"structure",
  "members":{
    "Grants":{"shape":"GrantList"},
    "NextToken":{"shape":"String"}
  }
},
"ListFailuresForLicenseConfigurationOperationsRequest":{
  "type":"structure",
  "required":["LicenseConfigurationArn"],
  "members":{
    "LicenseConfigurationArn":{"shape":"String"},
    "MaxResults":{"shape":"BoxInteger"},
    "NextToken":{"shape":"String"}
  }
},
"ListFailuresForLicenseConfigurationOperationsResponse":{
  "type":"structure",
  "members":{
    "LicenseOperationFailureList":{"shape":"LicenseOperationFailureList"},
    "NextToken":{"shape":"String"}
  }
},
"ListLicenseConfigurationsRequest":{
  "type":"structure",
  "members":{
    "LicenseConfigurationArns":{"shape":"StringList"},
    "MaxResults":{"shape":"BoxInteger"},
    "NextToken":{"shape":"String"},
    "Filters":{"shape":"Filters"}
  }
},
"ListLicenseConfigurationsResponse":{
  "type":"structure",
  "members":{
    "LicenseConfigurations":{"shape":"LicenseConfigurations"},

```

```

    "NextToken":{"shape":"String"}
  }
},
>ListLicenseConversionTasksRequest":{"
  "type":"structure",
  "members":{"
    "NextToken":{"shape":"String"},
    "MaxResults":{"shape":"BoxInteger"},
    "Filters":{"shape":"Filters"}
  }
},
>ListLicenseConversionTasksResponse":{"
  "type":"structure",
  "members":{"
    "LicenseConversionTasks":{"shape":"LicenseConversionTasks"},
    "NextToken":{"shape":"String"}
  }
},
>ListLicenseManagerReportGeneratorsRequest":{"
  "type":"structure",
  "members":{"
    "Filters":{"shape":"FilterList"},
    "NextToken":{"shape":"String"},
    "MaxResults":{"shape":"MaxSize100"}
  }
},
>ListLicenseManagerReportGeneratorsResponse":{"
  "type":"structure",
  "members":{"
    "ReportGenerators":{"shape":"ReportGeneratorList"},
    "NextToken":{"shape":"String"}
  }
},
>ListLicenseSpecificationsForResourceRequest":{"
  "type":"structure",
  "required":["ResourceArn"],
  "members":{"
    "ResourceArn":{"shape":"String"},
    "MaxResults":{"shape":"BoxInteger"},
    "NextToken":{"shape":"String"}
  }
},
>ListLicenseSpecificationsForResourceResponse":{"
  "type":"structure",
  "members":{"
    "LicenseSpecifications":{"shape":"LicenseSpecifications"},
    "NextToken":{"shape":"String"}
  }
}

```

```

}
},
"ListLicenseVersionsRequest":{
  "type":"structure",
  "required":["LicenseArn"],
  "members":{
    "LicenseArn":{"shape":"Arn"},
    "NextToken":{"shape":"String"},
    "MaxResults":{"shape":"MaxSize100"}
  }
},
"ListLicenseVersionsResponse":{
  "type":"structure",
  "members":{
    "Licenses":{"shape":"LicenseList"},
    "NextToken":{"shape":"String"}
  }
},
"ListLicensesRequest":{
  "type":"structure",
  "members":{
    "LicenseArns":{"shape":"ArnList"},
    "Filters":{"shape":"FilterList"},
    "NextToken":{"shape":"String"},
    "MaxResults":{"shape":"MaxSize100"}
  }
},
"ListLicensesResponse":{
  "type":"structure",
  "members":{
    "Licenses":{"shape":"LicenseList"},
    "NextToken":{"shape":"String"}
  }
},
"ListReceivedGrantsForOrganizationRequest":{
  "type":"structure",
  "required":["LicenseArn"],
  "members":{
    "LicenseArn":{"shape":"Arn"},
    "Filters":{"shape":"FilterList"},
    "NextToken":{"shape":"String"},
    "MaxResults":{"shape":"MaxSize100"}
  }
},
"ListReceivedGrantsForOrganizationResponse":{
  "type":"structure",
  "members":{
    "Grants":{"shape":"GrantList"},

```

```

    "NextToken":{"shape":"String"}
  }
},
"ListReceivedGrantsRequest":{"
  "type":"structure",
  "members":{"
    "GrantArns":{"shape":"ArnList"},
    "Filters":{"shape":"FilterList"},
    "NextToken":{"shape":"String"},
    "MaxResults":{"shape":"MaxSize100"}
  }
},
"ListReceivedGrantsResponse":{"
  "type":"structure",
  "members":{"
    "Grants":{"shape":"GrantList"},
    "NextToken":{"shape":"String"}
  }
},
"ListReceivedLicensesForOrganizationRequest":{"
  "type":"structure",
  "members":{"
    "Filters":{"shape":"FilterList"},
    "NextToken":{"shape":"String"},
    "MaxResults":{"shape":"MaxSize100"}
  }
},
"ListReceivedLicensesForOrganizationResponse":{"
  "type":"structure",
  "members":{"
    "Licenses":{"shape":"GrantedLicenseList"},
    "NextToken":{"shape":"String"}
  }
},
"ListReceivedLicensesRequest":{"
  "type":"structure",
  "members":{"
    "LicenseArns":{"shape":"ArnList"},
    "Filters":{"shape":"FilterList"},
    "NextToken":{"shape":"String"},
    "MaxResults":{"shape":"MaxSize100"}
  }
},
"ListReceivedLicensesResponse":{"
  "type":"structure",
  "members":{"
    "Licenses":{"shape":"GrantedLicenseList"},
    "NextToken":{"shape":"String"}
  }
}

```

```

    }
  },
  "ListResourceInventoryRequest":{
    "type":"structure",
    "members":{
      "MaxResults":{"shape":"BoxInteger"},
      "NextToken":{"shape":"String"},
      "Filters":{"shape":"InventoryFilterList"}
    }
  },
  "ListResourceInventoryResponse":{
    "type":"structure",
    "members":{
      "ResourceInventoryList":{"shape":"ResourceInventoryList"},
      "NextToken":{"shape":"String"}
    }
  },
  "ListTagsForResourceRequest":{
    "type":"structure",
    "required":["ResourceArn"],
    "members":{
      "ResourceArn":{"shape":"String"}
    }
  },
  "ListTagsForResourceResponse":{
    "type":"structure",
    "members":{
      "Tags":{"shape":"TagList"}
    }
  },
  "ListTokensRequest":{
    "type":"structure",
    "members":{
      "TokenIds":{"shape":"StringList"},
      "Filters":{"shape":"FilterList"},
      "NextToken":{"shape":"String"},
      "MaxResults":{"shape":"MaxSize100"}
    }
  },
  "ListTokensResponse":{
    "type":"structure",
    "members":{
      "Tokens":{"shape":"TokenList"},
      "NextToken":{"shape":"String"}
    }
  },
  "ListUsageForLicenseConfigurationRequest":{
    "type":"structure",

```



```

"required":["LicenseConfigurationArn"],
"members":{
  "LicenseConfigurationArn":{"shape":"String"},
  "MaxResults":{"shape":"BoxInteger"},
  "NextToken":{"shape":"String"},
  "Filters":{"shape":"Filters"}
}
},
"ListUsageForLicenseConfigurationResponse":{
  "type":"structure",
  "members":{
    "LicenseConfigurationUsageList":{"shape":"LicenseConfigurationUsageList"},
    "NextToken":{"shape":"String"}
  }
},
"Location":{"type":"string"},
"Long":{"type":"long"},
"ManagedResourceSummary":{
  "type":"structure",
  "members":{
    "ResourceType":{"shape":"ResourceType"},
    "AssociationCount":{"shape":"BoxLong"}
  }
},
"ManagedResourceSummaryList":{
  "type":"list",
  "member":{"shape":"ManagedResourceSummary"}
},
"MaxSize100":{
  "type":"integer",
  "max":100,
  "min":1
},
"MaxSize3StringList":{
  "type":"list",
  "member":{"shape":"String"},
  "max":3
},
"Message":{"type":"string"},
"Metadata":{
  "type":"structure",
  "members":{
    "Name":{"shape":"String"},
    "Value":{"shape":"String"}
  }
},
"MetadataList":{
  "type":"list",

```

```

"member":{"shape":"Metadata"}
},
"NoEntitlementsAllowedException":{"
  "type":"structure",
  "members":{"
    "Message":{"shape":"Message"}
  },
  "exception":true
},
"Options":{"
  "type":"structure",
  "members":{"
    "ActivationOverrideBehavior":{"shape":"ActivationOverrideBehavior"}
  }
},
"OrganizationConfiguration":{"
  "type":"structure",
  "required":["EnableIntegration"],
  "members":{"
    "EnableIntegration":{"shape":"Boolean"}
  }
},
"PrincipalArnList":{"
  "type":"list",
  "member":{"shape":"Arn"},
  "max":1,
  "min":1
},
"ProductInformation":{"
  "type":"structure",
  "required":[
    "ResourceType",
    "ProductInformationFilterList"
  ],
  "members":{"
    "ResourceType":{"shape":"String"},
    "ProductInformationFilterList":{"shape":"ProductInformationFilterList"}
  }
},
"ProductInformationFilter":{"
  "type":"structure",
  "required":[
    "ProductInformationFilterName",
    "ProductInformationFilterComparator"
  ],
  "members":{"
    "ProductInformationFilterName":{"shape":"String"},
    "ProductInformationFilterValue":{"shape":"StringList"},

```

```

    "ProductInformationFilterComparator":{"shape":"String"}
  }
},
"ProductInformationFilterList":{
  "type":"list",
  "member":{"shape":"ProductInformationFilter"}
},
"ProductInformationList":{
  "type":"list",
  "member":{"shape":"ProductInformation"}
},
"ProvisionalConfiguration":{
  "type":"structure",
  "required":["MaxTimeToLiveInMinutes"],
  "members":{
    "MaxTimeToLiveInMinutes":{"shape":"BoxInteger"}
  }
},
"RateLimitExceededException":{
  "type":"structure",
  "members":{
    "Message":{"shape":"Message"}
  },
  "exception":true
},
"ReceivedMetadata":{
  "type":"structure",
  "members":{
    "ReceivedStatus":{"shape":"ReceivedStatus"},
    "ReceivedStatusReason":{"shape":"StatusReasonMessage"},
    "AllowedOperations":{"shape":"AllowedOperationList"}
  }
},
"ReceivedStatus":{
  "type":"string",
  "enum":[
    "PENDING_WORKFLOW",
    "PENDING_ACCEPT",
    "REJECTED",
    "ACTIVE",
    "FAILED_WORKFLOW",
    "DELETED",
    "DISABLED",
    "WORKFLOW_COMPLETED"
  ]
},
"RedirectException":{
  "type":"structure",

```

```

"members":{
  "Location":{"shape":"Location"},
  "Message":{"shape":"Message"}
},
"exception":true
},
"RejectGrantRequest":{
  "type":"structure",
  "required":["GrantArn"],
  "members":{
    "GrantArn":{"shape":"Arn"}
  }
},
"RejectGrantResponse":{
  "type":"structure",
  "members":{
    "GrantArn":{"shape":"Arn"},
    "Status":{"shape":"GrantStatus"},
    "Version":{"shape":"String"}
  }
},
"RenewType":{
  "type":"string",
  "enum":[
    "None",
    "Weekly",
    "Monthly"
  ]
},
"ReportContext":{
  "type":"structure",
  "required":["licenseConfigurationArns"],
  "members":{
    "licenseConfigurationArns":{"shape":"ArnList"}
  }
},
"ReportFrequency":{
  "type":"structure",
  "members":{
    "value":{"shape":"Integer"},
    "period":{"shape":"ReportFrequencyType"}
  }
},
"ReportFrequencyType":{
  "type":"string",
  "enum":[
    "DAY",
    "WEEK",

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```

    "MONTH"
  ]
},
"ReportGenerator":{
  "type":"structure",
  "members":{
    "ReportGeneratorName":{"shape":"String"},
    "ReportType":{"shape":"ReportTypeList"},
    "ReportContext":{"shape":"ReportContext"},
    "ReportFrequency":{"shape":"ReportFrequency"},
    "LicenseManagerReportGeneratorArn":{"shape":"String"},
    "LastRunStatus":{"shape":"String"},
    "LastRunFailureReason":{"shape":"String"},
    "LastReportGenerationTime":{"shape":"String"},
    "ReportCreatorAccount":{"shape":"String"},
    "Description":{"shape":"String"},
    "S3Location":{"shape":"S3Location"},
    "CreateTime":{"shape":"String"},
    "Tags":{"shape":"TagList"}
  }
},
"ReportGeneratorList":{
  "type":"list",
  "member":{"shape":"ReportGenerator"}
},
"ReportGeneratorName":{
  "type":"string",
  "max":100,
  "min":1
},
"ReportType":{
  "type":"string",
  "enum":[
    "LicenseConfigurationSummaryReport",
    "LicenseConfigurationUsageReport"
  ]
},
"ReportTypeList":{
  "type":"list",
  "member":{"shape":"ReportType"}
},
"ResourceInventory":{
  "type":"structure",
  "members":{
    "ResourceId":{"shape":"String"},
    "ResourceType":{"shape":"ResourceType"},
    "ResourceArn":{"shape":"String"},
    "Platform":{"shape":"String"},

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    "PlatformVersion":{"shape":"String"},
    "ResourceOwningAccountId":{"shape":"String"}
  }
},
"ResourceInventoryList":{
  "type":"list",
  "member":{"shape":"ResourceInventory"}
},
"ResourceLimitExceededException":{
  "type":"structure",
  "members":{
    "Message":{"shape":"Message"}
  },
  "exception":true
},
"ResourceNotFoundException":{
  "type":"structure",
  "members":{
    "Message":{"shape":"Message"}
  },
  "exception":true
},
"ResourceType":{
  "type":"string",
  "enum":[
    "EC2_INSTANCE",
    "EC2_HOST",
    "EC2_AMI",
    "RDS",
    "SYSTEMS_MANAGER_MANAGED_INSTANCE"
  ]
},
"S3Location":{
  "type":"structure",
  "members":{
    "bucket":{"shape":"String"},
    "keyPrefix":{"shape":"String"}
  }
},
"ServerInternalException":{
  "type":"structure",
  "members":{
    "Message":{"shape":"Message"}
  },
  "exception":true,
  "fault":true
},

```

```

"SignedToken":{
  "type":"string",
  "min":4096
},
>StatusReasonMessage":{
  "type":"string",
  "max":400,
  "pattern":"[\\s\\S]+"
},
"String":{"type":"string"},
"StringList":{
  "type":"list",
  "member":{"shape":"String"}
},
"Tag":{
  "type":"structure",
  "members":{
    "Key":{"shape":"String"},
    "Value":{"shape":"String"}
  }
},
"TagKeyList":{
  "type":"list",
  "member":{"shape":"String"}
},
"TagList":{
  "type":"list",
  "member":{"shape":"Tag"}
},
"TagResourceRequest":{
  "type":"structure",
  "required":[
    "ResourceArn",
    "Tags"
  ],
  "members":{
    "ResourceArn":{"shape":"String"},
    "Tags":{"shape":"TagList"}
  }
},
"TagResourceResponse":{
  "type":"structure",
  "members":{
  }
},
"TokenData":{
  "type":"structure",
  "members":{

```

```

    "TokenId":{"shape":"String"},
    "TokenType":{"shape":"String"},
    "LicenseArn":{"shape":"String"},
    "ExpirationTime":{"shape":"ISO8601DateTime"},
    "TokenProperties":{"shape":"MaxSize3StringList"},
    "RoleArns":{"shape":"ArnList"},
    "Status":{"shape":"String"}
  }
},
"TokenList":{
  "type":"list",
  "member":{"shape":"TokenData"}
},
"TokenString":{
  "type":"string",
  "max":4096,
  "pattern":"\\S+"
},
"TokenType":{
  "type":"string",
  "enum":["REFRESH_TOKEN"]
},
"UnsupportedDigitalSignatureMethodException":{
  "type":"structure",
  "members":{
    "Message":{"shape":"Message"}
  },
  "exception":true
},
"UntagResourceRequest":{
  "type":"structure",
  "required":[
    "ResourceArn",
    "TagKeys"
  ],
  "members":{
    "ResourceArn":{"shape":"String"},
    "TagKeys":{"shape":"TagKeyList"}
  }
},
"UntagResourceResponse":{
  "type":"structure",
  "members":{
  }
},
"UpdateLicenseConfigurationRequest":{
  "type":"structure",
  "required":["LicenseConfigurationArn"],

```



```

"members":{
  "LicenseConfigurationArn":{"shape":"String"},
  "LicenseConfigurationStatus":{"shape":"LicenseConfigurationStatus"},
  "LicenseRules":{"shape":"StringList"},
  "LicenseCount":{"shape":"BoxLong"},
  "LicenseCountHardLimit":{"shape":"BoxBoolean"},
  "Name":{"shape":"String"},
  "Description":{"shape":"String"},
  "ProductInformationList":{"shape":"ProductInformationList"},
  "DisassociateWhenNotFound":{"shape":"BoxBoolean"}
}
},
"UpdateLicenseConfigurationResponse":{
  "type":"structure",
  "members":{
  }
},
"UpdateLicenseManagerReportGeneratorRequest":{
  "type":"structure",
  "required":[
    "LicenseManagerReportGeneratorArn",
    "ReportGeneratorName",
    "Type",
    "ReportContext",
    "ReportFrequency",
    "ClientToken"
  ],
  "members":{
    "LicenseManagerReportGeneratorArn":{"shape":"String"},
    "ReportGeneratorName":{"shape":"ReportGeneratorName"},
    "Type":{"shape":"ReportTypeList"},
    "ReportContext":{"shape":"ReportContext"},
    "ReportFrequency":{"shape":"ReportFrequency"},
    "ClientToken":{"shape":"ClientRequestToken"},
    "Description":{"shape":"String"}
  }
},
"UpdateLicenseManagerReportGeneratorResponse":{
  "type":"structure",
  "members":{
  }
},
"UpdateLicenseSpecificationsForResourceRequest":{
  "type":"structure",
  "required":["ResourceArn"],
  "members":{
    "ResourceArn":{"shape":"String"},
    "AddLicenseSpecifications":{"shape":"LicenseSpecifications"},

```

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    "RemoveLicenseSpecifications":{"shape":"LicenseSpecifications"}
  }
},
"UpdateLicenseSpecificationsForResourceResponse":{"
  "type":"structure",
  "members":{"
  }
},
"UpdateServiceSettingsRequest":{"
  "type":"structure",
  "members":{"
    "S3BucketArn":{"shape":"String"},
    "SnsTopicArn":{"shape":"String"},
    "OrganizationConfiguration":{"shape":"OrganizationConfiguration"},
    "EnableCrossAccountsDiscovery":{"shape":"BoxBoolean"}
  }
},
"UpdateServiceSettingsResponse":{"
  "type":"structure",
  "members":{"
  }
},
"UsageOperation":{"
  "type":"string",
  "max":50
},
"ValidationException":{"
  "type":"structure",
  "members":{"
    "Message":{"shape":"Message"}
  },
  "exception":true
}
}
}
{
  "version": "2.0",
  "service": "<p>License Manager makes it easier to manage licenses from software vendors across multiple Amazon Web Services accounts and on-premises servers.</p>",
  "operations": {
    "AcceptGrant": "<p>Accepts the specified grant.</p>",
    "CheckInLicense": "<p>Checks in the specified license. Check in a license when it is no longer in use.</p>",
    "CheckoutBorrowLicense": "<p>Checks out the specified license for offline use.</p>",
    "CheckoutLicense": "<p>Checks out the specified license.</p> <note> <p>If the account that created the license is the same that is performing the check out, you must specify the account as the beneficiary.</p> </note>",
    "CreateGrant": "<p>Creates a grant for the specified license. A grant shares the use of license entitlements with a specific Amazon Web Services account, an organization, or an organizational unit (OU). For more information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-licenses.html\">Granted

```

licenses in License Manager

in the *License Manager User Guide*.

"CreateGrantVersion": "Creates a new version of the specified grant. For more information, see <https://docs.aws.amazon.com/license-manager/latest/userguide/granted-licenses.html>>Granted licenses in License Manager

in the *License Manager User Guide*.

"CreateLicense": "Creates a license.

"CreateLicenseConfiguration": "Creates a license configuration. A license configuration is an abstraction of a customer license agreement that can be consumed and enforced by License Manager. Components include specifications for the license type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, Dedicated Instance, Dedicated Host, or all of these), license affinity to host (how long a license must be associated with a host), and the number of licenses purchased and used.

"CreateLicenseConversionTaskForResource":

"Creates a new license conversion task.

"CreateLicenseManagerReportGenerator": "Creates a report generator.

"CreateLicenseVersion": "Creates a new version of the specified license.

"CreateToken": "Creates a long-lived token. A refresh token is a JWT token used to get an access token. With an access token, you can call AssumeRoleWithWebIdentity to get role credentials that you can use to call License Manager to manage the specified license.

"DeleteGrant": "Deletes the specified grant.

"DeleteLicense": "Deletes the specified license.

"DeleteLicenseConfiguration": "Deletes the specified license configuration. You cannot delete a license configuration that is in use.

"DeleteLicenseManagerReportGenerator": "Deletes the specified report generator. This action deletes the report generator, which stops it from generating future reports. The action cannot be reversed. It has no effect on the previous reports from this generator.

"DeleteToken": "Deletes the specified token. Must be called in the license home Region.

"ExtendLicenseConsumption": "Extends the expiration date for license consumption.

"GetAccessToken": "Gets a temporary access token to use with AssumeRoleWithWebIdentity. Access tokens are valid for one hour.

"GetGrant": "Gets detailed information about the specified grant.

"GetLicense": "Gets detailed information about the specified license.

"GetLicenseConfiguration": "Gets detailed information about the specified license configuration.

"GetLicenseConversionTask": "Gets information about the specified license type conversion task.

"GetLicenseManagerReportGenerator": "Gets information about the specified report generator.

"GetLicenseUsage": "Gets detailed information about the usage of the specified license.

"GetServiceSettings":

"Gets the License Manager settings for the current Region.

"ListAssociationsForLicenseConfiguration": "Lists the resource associations for the specified license configuration. Resource associations need not consume licenses from a license configuration. For example, an AMI or a stopped instance might not consume a license (depending on the license rules).

"ListDistributedGrants": "Lists the grants distributed for the specified license.

"ListFailuresForLicenseConfigurationOperations": "Lists the license configuration operations that failed.

"ListLicenseConfigurations": "Lists the license configurations for your account.

"ListLicenseConversionTasks": "Lists the license type conversion tasks for your account.

"ListLicenseManagerReportGenerators": "Lists the report generators for your account.

"ListLicenseSpecificationsForResource": "Describes the license configurations for the specified resource.

"ListLicenseVersions": "Lists all versions of the specified license.

"ListLicenses": "<p>Lists the licenses for your account.</p>",

"ListReceivedGrants": "<p>Lists grants that are received. Received grants are grants created while specifying the recipient as this Amazon Web Services account, your organization, or an organizational unit (OU) to which this member account belongs.</p>",

"ListReceivedGrantsForOrganization": "<p>Lists the grants received for all accounts in the organization.</p>",

"ListReceivedLicenses": "<p>Lists received licenses.</p>",

"ListReceivedLicensesForOrganization": "<p>Lists the licenses received for all accounts in the organization.</p>",

"ListResourceInventory": "<p>Lists resources managed using Systems Manager inventory.</p>",

"ListTagsForResource": "<p>Lists the tags for the specified license configuration.</p>",

"ListTokens": "<p>Lists your tokens.</p>",

"ListUsageForLicenseConfiguration":

<p>Lists all license usage records for a license configuration, displaying license consumption details by resource at a selected point in time. Use this action to audit the current license consumption for any license inventory and configuration.</p>",

"RejectGrant": "<p>Rejects the specified grant.</p>",

"TagResource": "<p>Adds the specified tags to the specified license configuration.</p>",

"UntagResource": "<p>Removes the specified tags from the specified license configuration.</p>",

"UpdateLicenseConfiguration": "<p>Modifies the attributes of an existing license configuration.</p>",

"UpdateLicenseManagerReportGenerator": "<p>Updates a report generator.</p> <p>After you make changes to a report generator, it starts generating new reports within 60 minutes of being updated.</p>",

"UpdateLicenseSpecificationsForResource": "<p>Adds or removes the specified license configurations for the specified Amazon Web Services resource.</p> <p>You can update the license specifications of AMIs, instances, and hosts. You cannot update the license specifications for launch templates and CloudFormation templates, as they send license configurations to the operation that creates the resource.</p>",

"UpdateServiceSettings": "<p>Updates License Manager settings for the current Region.</p>"

},

"shapes": {

  "AcceptGrantRequest": {

    "base": null,

    "refs": {

    }

  },

  "AcceptGrantResponse": {

    "base": null,

    "refs": {

    }

  },

  "AccessDeniedException": {

    "base": "<p>Access to resource denied.</p>",

    "refs": {

    }

  },

  "ActivationOverrideBehavior": {

    "base": null,

    "refs": {

      "Options\$ActivationOverrideBehavior": "<p>An activation option for your grant that determines the behavior

of activating a grant. Activation options can only be used with granted licenses sourced from the Amazon Web Services Marketplace. Additionally, the operation must specify the value of `ACTIVE` for the `Status` parameter.

- As a license administrator, you can optionally specify an `ActivationOverrideBehavior` when activating a grant.
- As a grantor, you can optionally specify an `ActivationOverrideBehavior` when you activate a grant for a grantee account in your organization.
- As a grantee, if the grantor creating the distributed grant doesn't specify an `ActivationOverrideBehavior`, you can optionally specify one when you are activating the grant.

<code>DISTRIBUTED_GRANTS_ONLY</code>	Use this value to activate a grant without replacing any member accounts active grants for the same product.
<code>ALL_GRANTS_PERMITTED_BY_ISSUER</code>	Use this value to activate a grant and disable other active grants in any member accounts for the same product. This action will also replace their previously activated grants with this activated grant.

```

}
},
"AllowedOperation": {
  "base": null,
  "refs": {
    "AllowedOperationList$member": null
  }
},
"AllowedOperationList": {
  "base": null,
  "refs": {
    "CreateGrantRequest$AllowedOperations": "<p>Allowed operations for the grant.</p>",
    "CreateGrantVersionRequest$AllowedOperations": "<p>Allowed operations for the grant.</p>",
    "Grant$GrantedOperations": "<p>Granted operations.</p>",
    "ReceivedMetadata$AllowedOperations": "<p>Allowed operations.</p>"
  }
},
"Arn": {
  "base": null,
  "refs": {
    "AcceptGrantRequest$GrantArn": "<p>Amazon Resource Name (ARN) of the grant.</p>",
    "AcceptGrantResponse$GrantArn": "<p>Grant ARN.</p>",
    "ArnList$member": null,
    "CheckoutBorrowLicenseRequest$LicenseArn": "<p>Amazon Resource Name (ARN) of the license. The license must use the borrow consumption configuration.</p>",
    "CheckoutBorrowLicenseResponse$LicenseArn":
    "<p>Amazon Resource Name (ARN) of the license.</p>",
    "CreateGrantRequest$LicenseArn": "<p>Amazon Resource Name (ARN) of the license.</p>",
    "CreateGrantResponse$GrantArn": "<p>Grant ARN.</p>",
    "CreateGrantVersionRequest$GrantArn": "<p>Amazon Resource Name (ARN) of the grant.</p>",
    "CreateGrantVersionResponse$GrantArn": "<p>Grant ARN.</p>",
    "CreateLicenseConversionTaskForResourceRequest$ResourceArn": "<p>Amazon Resource Name (ARN) of the resource you are converting the license type for.</p>",
    "CreateLicenseResponse$LicenseArn": "<p>Amazon Resource Name (ARN) of the license.</p>",
    "CreateLicenseVersionRequest$LicenseArn": "<p>Amazon Resource Name (ARN) of the license.</p>",

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    "CreateLicenseVersionResponse$LicenseArn": "<p>License ARN.</p>",
    "CreateTokenRequest$LicenseArn": "<p>Amazon Resource Name (ARN) of the license. The ARN is mapped
to the aud claim of the JWT token.</p>",
    "DeleteGrantRequest$GrantArn":
"<p>Amazon Resource Name (ARN) of the grant.</p>",
    "DeleteGrantResponse$GrantArn": "<p>Grant ARN.</p>",
    "DeleteLicenseRequest$LicenseArn": "<p>Amazon Resource Name (ARN) of the license.</p>",
    "GetGrantRequest$GrantArn": "<p>Amazon Resource Name (ARN) of the grant.</p>",
    "GetLicenseRequest$LicenseArn": "<p>Amazon Resource Name (ARN) of the license.</p>",
    "GetLicenseUsageRequest$LicenseArn": "<p>Amazon Resource Name (ARN) of the license.</p>",
    "Grant$GrantArn": "<p>Amazon Resource Name (ARN) of the grant.</p>",
    "Grant$ParentArn": "<p>Parent ARN.</p>",
    "Grant$LicenseArn": "<p>License ARN.</p>",
    "Grant$GranteePrincipalArn": "<p>The grantee principal ARN.</p>",
    "GrantedLicense$LicenseArn": "<p>Amazon Resource Name (ARN) of the license.</p>",
    "License$LicenseArn": "<p>Amazon Resource Name (ARN) of the license.</p>",
    "ListLicenseVersionsRequest$LicenseArn": "<p>Amazon Resource Name (ARN) of
the license.</p>",
    "ListReceivedGrantsForOrganizationRequest$LicenseArn": "<p>The Amazon Resource Name (ARN) of the
received license.</p>",
    "PrincipalArnList$member": null,
    "RejectGrantRequest$GrantArn": "<p>Amazon Resource Name (ARN) of the grant.</p>",
    "RejectGrantResponse$GrantArn": "<p>Grant ARN.</p>"
  }
},
"ArnList": {
  "base": null,
  "refs": {
    "CreateTokenRequest$RoleArns": "<p>Amazon Resource Name (ARN) of the IAM roles to embed in the
token. License Manager does not check whether the roles are in use.</p>",
    "ListDistributedGrantsRequest$GrantArns": "<p>Amazon Resource Names (ARNs) of the grants.</p>",
    "ListLicensesRequest$LicenseArns": "<p>Amazon Resource Names (ARNs) of the licenses.</p>",
    "ListReceivedGrantsRequest$GrantArns": "<p>Amazon Resource Names (ARNs) of the grants.</p>",
    "ListReceivedLicensesRequest$LicenseArns": "<p>Amazon Resource Names (ARNs) of the licenses.</p>",

    "ReportContext$licenseConfigurationArns": "<p>Amazon Resource Name (ARN) of the license configuration
that this generator reports on.</p>",
    "TokenData$RoleArns": "<p>Amazon Resource Names (ARN) of the roles included in the token.</p>"
  }
},
"AuthorizationException": {
  "base": "<p>The Amazon Web Services user account does not have permission to perform the action. Check the
IAM policy associated with this account.</p>",
  "refs": {
  }
},
"AutomatedDiscoveryInformation": {
  "base": "<p>Describes automated discovery.</p>",

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"refs": {
  "GetLicenseConfigurationResponse$AutomatedDiscoveryInformation": "<p>Automated discovery
information.</p>",
  "LicenseConfiguration$AutomatedDiscoveryInformation": "<p>Automated discovery information.</p>"
}
},
"Boolean": {
  "base": null,
  "refs": {
    "ExtendLicenseConsumptionRequest$DryRun": "<p>Checks whether you have the required permissions for the
action,
without actually making the request. Provides an error response if you do not have the required permissions.</p>",
    "OrganizationConfiguration$EnableIntegration": "<p>Enables Organizations integration.</p>"
  }
},
"BorrowConfiguration": {
  "base": "<p>Details about a borrow configuration.</p>",
  "refs": {
    "ConsumptionConfiguration$BorrowConfiguration": "<p>Details about a borrow configuration.</p>"
  }
},
"BoxBoolean": {
  "base": null,
  "refs": {
    "BorrowConfiguration$AllowEarlyCheckIn": "<p>Indicates whether early check-ins are allowed.</p>",
    "CreateLicenseConfigurationRequest$LicenseCountHardLimit": "<p>Indicates whether hard or soft license
enforcement is used. Exceeding a hard limit blocks the launch of new instances.</p>",
    "CreateLicenseConfigurationRequest$DisassociateWhenNotFound": "<p>When true, disassociates a resource
when software is uninstalled.</p>",
    "Entitlement$Overage": "<p>Indicates
whether overages are allowed.</p>",
    "Entitlement$AllowCheckIn": "<p>Indicates whether check-ins are allowed.</p>",
    "GetLicenseConfigurationResponse$LicenseCountHardLimit": "<p>Sets the number of available licenses as a
hard limit.</p>",
    "GetLicenseConfigurationResponse$DisassociateWhenNotFound": "<p>When true, disassociates a resource
when software is uninstalled.</p>",
    "GetServiceSettingsResponse$EnableCrossAccountsDiscovery": "<p>Indicates whether cross-account
discovery is enabled.</p>",
    "LicenseConfiguration$LicenseCountHardLimit": "<p>Number of available licenses as a hard limit.</p>",
    "LicenseConfiguration$DisassociateWhenNotFound": "<p>When true, disassociates a resource when software
is uninstalled.</p>",
    "UpdateLicenseConfigurationRequest$LicenseCountHardLimit": "<p>New hard limit of the number of
available licenses.</p>",
    "UpdateLicenseConfigurationRequest$DisassociateWhenNotFound": "<p>When true, disassociates
a resource when software is uninstalled.</p>",
    "UpdateServiceSettingsRequest$EnableCrossAccountsDiscovery": "<p>Activates cross-account
discovery.</p>"
  }
}

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    },
    "BoxInteger": {
      "base": null,
      "refs": {
        "BorrowConfiguration$MaxTimeToLiveInMinutes": "<p>Maximum time for the borrow configuration, in
minutes.</p>",
        "ListAssociationsForLicenseConfigurationRequest$MaxResults": "<p>Maximum number of results to return in
a single call.</p>",
        "ListFailuresForLicenseConfigurationOperationsRequest$MaxResults": "<p>Maximum number of results to
return in a single call.</p>",
        "ListLicenseConfigurationsRequest$MaxResults": "<p>Maximum number of results to return in a single
call.</p>",
        "ListLicenseConversionTasksRequest$MaxResults": "<p>Maximum number of results to return in a single
call.</p>",
        "ListLicenseSpecificationsForResourceRequest$MaxResults": "<p>Maximum number of results to return in a
single call.</p>",

        "ListResourceInventoryRequest$MaxResults": "<p>Maximum number of results to return in a single call.</p>",
        "ListUsageForLicenseConfigurationRequest$MaxResults": "<p>Maximum number of results to return in a
single call.</p>",
        "ProvisionalConfiguration$MaxTimeToLiveInMinutes": "<p>Maximum time for the provisional configuration,
in minutes.</p>"
      }
    },
    "BoxLong": {
      "base": null,
      "refs": {
        "ConsumedLicenseSummary$ConsumedLicenses": "<p>Number of licenses consumed by the resource.</p>",
        "CreateLicenseConfigurationRequest$LicenseCount": "<p>Number of licenses managed by the license
configuration.</p>",
        "GetLicenseConfigurationResponse$LicenseCount": "<p>Number of available licenses.</p>",
        "GetLicenseConfigurationResponse$ConsumedLicenses": "<p>Number of licenses assigned to resources.</p>",
        "LicenseConfiguration$LicenseCount": "<p>Number of licenses managed by the license configuration.</p>",
        "LicenseConfiguration$ConsumedLicenses":
        "<p>Number of licenses consumed. </p>",
        "LicenseConfigurationUsage$ConsumedLicenses": "<p>Number of licenses consumed by the resource.</p>",
        "ManagedResourceSummary$AssociationCount": "<p>Number of resources associated with licenses.</p>",
        "UpdateLicenseConfigurationRequest$LicenseCount": "<p>New number of licenses managed by the license
configuration.</p>"
      }
    },
    "CheckInLicenseRequest": {
      "base": null,
      "refs": {
      }
    },
    "CheckInLicenseResponse": {
      "base": null,

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"refs": {
}
},
"CheckoutBorrowLicenseRequest": {
  "base": null,
  "refs": {
  }
},
"CheckoutBorrowLicenseResponse": {
  "base": null,
  "refs": {
  }
},
"CheckoutLicenseRequest": {
  "base": null,
  "refs": {
  }
},
"CheckoutLicenseResponse": {
  "base": null,
  "refs": {
  }
},
"CheckoutType": {
  "base": null,
  "refs": {
    "CheckoutLicenseRequest$CheckoutType": "<p>Checkout type.</p>",
    "CheckoutLicenseResponse$CheckoutType": "<p>Checkout type.</p>"
  }
},
"ClientRequestToken": {
  "base": null,
  "refs": {
    "CreateLicenseManagerReportGeneratorRequest$ClientToken": "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
    "UpdateLicenseManagerReportGeneratorRequest$ClientToken": "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>"
  }
},
"ClientToken": {
  "base": null,
  "refs": {
    "CheckoutBorrowLicenseRequest$ClientToken": "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
    "CheckoutLicenseRequest$ClientToken": "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
    "CreateGrantRequest$ClientToken": "<p>Unique, case-sensitive

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identifier that you provide to ensure the idempotency of the request.</p>",
  "CreateGrantVersionRequest$ClientToken": "<p>Unique, case-sensitive identifier that you provide to ensure
the idempotency of the request.</p>",
  "CreateLicenseRequest$ClientToken": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",
  "CreateLicenseVersionRequest$ClientToken": "<p>Unique, case-sensitive identifier that you provide to ensure
the idempotency of the request.</p>",
  "CreateTokenRequest$ClientToken": "<p>Idempotency token, valid for 10 minutes.</p>"
}
},
"ConflictException": {
  "base": "<p>There was a conflict processing the request. Try your request again.</p>",
  "refs": {
  }
},
"ConsumedLicenseSummary": {
  "base": "<p>Details about license consumption.</p>",
  "refs": {
    "ConsumedLicenseSummaryList$member": null
  }
},
"ConsumedLicenseSummaryList": {
  "base": null,
  "refs": {
    "GetLicenseConfigurationResponse$ConsumedLicenseSummaryList": "<p>Summaries of the licenses
consumed by resources.</p>",
    "LicenseConfiguration$ConsumedLicenseSummaryList": "<p>Summaries for licenses consumed by various
resources.</p>"
  }
},
"ConsumptionConfiguration": {
  "base": "<p>Details about a consumption configuration.</p>",
  "refs": {
    "CreateLicenseRequest$ConsumptionConfiguration": "<p>Configuration for consumption of the license.
Choose a provisional configuration for workloads running with continuous connectivity. Choose a borrow
configuration for workloads with offline usage.</p>",
    "CreateLicenseVersionRequest$ConsumptionConfiguration": "<p>Configuration for consumption of the
license. Choose a provisional configuration for workloads running with continuous connectivity. Choose a borrow
configuration for workloads with offline usage.</p>",
    "GrantedLicense$ConsumptionConfiguration":
"<p>Configuration for consumption of the license.</p>",
    "License$ConsumptionConfiguration": "<p>Configuration for consumption of the license.</p>"
  }
},
"CreateGrantRequest": {
  "base": null,
  "refs": {
  }
}

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},
"CreateGrantResponse": {
  "base": null,
  "refs": {
  }
},
"CreateGrantVersionRequest": {
  "base": null,
  "refs": {
  }
},
"CreateGrantVersionResponse": {
  "base": null,
  "refs": {
  }
},
"CreateLicenseConfigurationRequest": {
  "base": null,
  "refs": {
  }
},
"CreateLicenseConfigurationResponse": {
  "base": null,
  "refs": {
  }
},
"CreateLicenseConversionTaskForResourceRequest": {
  "base": null,
  "refs": {
  }
},
"CreateLicenseConversionTaskForResourceResponse": {
  "base": null,
  "refs": {
  }
},
"CreateLicenseManagerReportGeneratorRequest": {
  "base": null,
  "refs": {
  }
},
"CreateLicenseManagerReportGeneratorResponse": {
  "base": null,
  "refs": {
  }
},
"CreateLicenseRequest": {
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"base": null,
"refs": {
}
},
"CreateLicenseResponse": {
"base": null,
"refs": {
}
},
"CreateLicenseVersionRequest": {
"base": null,
"refs": {
}
},
"CreateLicenseVersionResponse": {
"base": null,
"refs": {
}
},
"CreateTokenRequest": {
"base": null,
"refs": {
}
},
"CreateTokenResponse": {
"base": null,
"refs": {
}
},
"DateTime": {
"base": null,
"refs": {
"AutomatedDiscoveryInformation$LastRunTime": "<p>Time that automated discovery last ran.</p>",
"GetLicenseConversionTaskResponse$StartTime": "<p>Time at which the license type conversion task was
started .</p>",
"GetLicenseConversionTaskResponse$LicenseConversionTime": "<p>Amount of time to complete the license
type conversion.</p>",
"GetLicenseConversionTaskResponse$EndTime": "<p>Time at which the license type conversion task was
completed.</p>",
"LicenseConfigurationAssociation$AssociationTime": "<p>Time when the license configuration was associated
with the resource.</p>",
"LicenseConfigurationUsage$AssociationTime": "<p>Time when the license configuration was initially
associated with the resource.</p>",
"LicenseConversionTask$StartTime": "<p>The time the conversion task was started at.</p>",
"LicenseConversionTask$LicenseConversionTime": "<p>The time the usage operation value of the resource
was changed.</p>",
"LicenseConversionTask$EndTime": "<p>The time the conversion task was completed.</p>",
"LicenseOperationFailure$FailureTime": "<p>Failure time.</p>"
}
}

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    }
  },
  "DatetimeRange": {
    "base": "<p>Describes a time range, in ISO8601-UTC format.</p>",
    "refs": {
      "CreateLicenseRequest$Validity": "<p>Date
and time range during which the license is valid, in ISO8601-UTC format.</p>",
      "CreateLicenseVersionRequest$Validity": "<p>Date and time range during which the license is valid, in
ISO8601-UTC format.</p>",
      "GrantedLicense$Validity": "<p>Date and time range during which the granted license is valid, in ISO8601-
UTC format.</p>",
      "License$Validity": "<p>Date and time range during which the license is valid, in ISO8601-UTC format.</p>"
    }
  },
  "DeleteGrantRequest": {
    "base": null,
    "refs": {
    }
  },
  "DeleteGrantResponse": {
    "base": null,
    "refs": {
    }
  },
  "DeleteLicenseConfigurationRequest": {
    "base": null,
    "refs": {
    }
  },
  "DeleteLicenseConfigurationResponse": {
    "base": null,
    "refs": {
    }
  },
  "DeleteLicenseManagerReportGeneratorRequest": {
    "base": null,
    "refs": {
    }
  },
  "DeleteLicenseManagerReportGeneratorResponse": {
    "base": null,
    "refs": {
    }
  },
  "DeleteLicenseRequest": {
    "base": null,
    "refs": {
    }
  }
}

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},
"DeleteLicenseResponse": {
  "base": null,
  "refs": {
  }
},
"DeleteTokenRequest": {
  "base": null,
  "refs": {
  }
},
"DeleteTokenResponse": {
  "base": null,
  "refs": {
  }
},
"DigitalSignatureMethod": {
  "base": null,
  "refs": {
    "CheckoutBorrowLicenseRequest$DigitalSignatureMethod": "<p>Digital signature method. The possible value is JSON Web Signature (JWS) algorithm PS384. For more information, see <a href='\"https://tools.ietf.org/html/rfc7518#section-3.5\"'>RFC 7518 Digital Signature with RSASSA-PSS</a>.</p>"
  }
},
"Entitlement": {
  "base": "<p>Describes a resource entitled for use with a license.</p>",
  "refs": {
    "EntitlementList$member": null
  }
},
"EntitlementData": {
  "base": "<p>Data associated with an entitlement resource.</p>",
  "refs": {
    "EntitlementDataList$member": null
  }
},
"EntitlementDataList": {
  "base": null,
  "refs": {
    "CheckoutBorrowLicenseRequest$Entitlements": "<p>License entitlements. Partial checkouts are not supported.</p>",
    "CheckoutBorrowLicenseResponse$EntitlementsAllowed": "<p>Allowed license entitlements.</p>",
    "CheckoutLicenseRequest$Entitlements": "<p>License entitlements.</p>",
    "CheckoutLicenseResponse$EntitlementsAllowed": "<p>Allowed license entitlements.</p>"
  }
},
"EntitlementDataUnit": {

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"base": null,
"refs": {
  "EntitlementData$Unit": "<p>Entitlement data unit.</p>",
  "EntitlementUsage$Unit": "<p>Entitlement usage unit.</p>"
}
},
"EntitlementList": {
  "base": null,
  "refs": {
    "CreateLicenseRequest$Entitlements": "<p>License entitlements.</p>",
    "CreateLicenseVersionRequest$Entitlements": "<p>License entitlements.</p>",
    "GrantedLicense$Entitlements":
"<p>License entitlements.</p>",
    "License$Entitlements": "<p>License entitlements.</p>"
  }
},
"EntitlementNotAllowedException": {
  "base": "<p>The entitlement is not allowed.</p>",
  "refs": {
  }
},
"EntitlementUnit": {
  "base": null,
  "refs": {
    "Entitlement$Unit": "<p>Entitlement unit.</p>"
  }
},
"EntitlementUsage": {
  "base": "<p>Usage associated with an entitlement resource.</p>",
  "refs": {
    "EntitlementUsageList$member": null
  }
},
"EntitlementUsageList": {
  "base": null,
  "refs": {
    "LicenseUsage$EntitlementUsages": "<p>License entitlement usages.</p>"
  }
},
"ExtendLicenseConsumptionRequest": {
  "base": null,
  "refs": {
  }
},
"ExtendLicenseConsumptionResponse": {
  "base": null,
  "refs": {
  }
}

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},
"FailedDependencyException": {
  "base": "<p>A dependency required to run the API is missing.</p>",
  "refs": {
  }
},
"Filter": {
  "base": "<p>A filter name and value pair that is used to return more specific results from a describe operation. Filters can be used to match a set of resources by specific criteria, such as tags, attributes, or IDs.</p>",
  "refs": {
    "FilterList$member": null,
    "Filters$member": null
  }
},
"FilterLimitExceededException": {
  "base": "<p>The request uses too many filters or too many filter values.</p>",
  "refs": {
  }
},
"FilterList": {
  "base": null,
  "refs": {
    "ListDistributedGrantsRequest$Filters": "<p>Filters to scope the results. The following filters are supported:</p> <ul> <li> <p> <code>LicenseArn</code> </p> </li> <li> <p> <code>GrantStatus</code> </p> </li> <li> <p> <code>GranteePrincipalARN</code> </p> </li> <li> <p> <code>ProductSKU</code> </p> </li> <li> <p> <code>LicenseIssuerName</code> </p> </li> </ul>",
    "ListLicenseManagerReportGeneratorsRequest$Filters":
      "<p>Filters to scope the results. The following filters are supported: </p> <ul> <li> <p> <code>LicenseConfigurationArn</code> </p> </li> </ul>",
    "ListLicensesRequest$Filters": "<p>Filters to scope the results. The following filters are supported:</p> <ul> <li> <p> <code>Beneficiary</code> </p> </li> <li> <p> <code>ProductSKU</code> </p> </li> <li> <p> <code>Fingerprint</code> </p> </li> <li> <p> <code>Status</code> </p> </li> </ul>",
    "ListReceivedGrantsForOrganizationRequest$Filters": "<p>Filters to scope the results. The following filters are supported:</p> <ul> <li> <p> <code>ParentArn</code> </p> </li> <li> <p> <code>GranteePrincipalArn</code> </p> </li> </ul>",
    "ListReceivedGrantsRequest$Filters": "<p>Filters to scope the results. The following filters are supported:</p> <ul> <li> <p> <code>ProductSKU</code> </p> </li> <li> <p> <code>LicenseIssuerName</code> </p> </li> <li> <p> <code>LicenseArn</code> </p> </li> <li> <p> <code>GrantStatus</code> </p> </li> <li> <p> <code>GranterAccountId</code> </p> </li> </ul>",
    "ListReceivedLicensesForOrganizationRequest$Filters": "<p>Filters to scope the results. The following filters are supported:</p> <ul> <li> <p> <code>Beneficiary</code> </p> </li> <li> <p> <code>ProductSKU</code> </p> </li> </ul>",
    "ListReceivedLicensesRequest$Filters": "<p>Filters to scope the results. The following filters are supported:</p> <ul> <li> <p> <code>ProductSKU</code> </p> </li> <li> <p> <code>Status</code> </p> </li> <li> <p> <code>Fingerprint</code> </p> </li> <li> <p> <code>IssuerName</code> </p> </li> <li> <p> <code>Beneficiary</code> </p> </li> </ul>",
    "ListTokensRequest$Filters": "<p>Filters to scope the results. The following filter is supported:</p> <ul> <li> <p> <code>LicenseArns</code> </p> </li> </ul>"
  }
}

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    }
  },
  "FilterName": {
    "base": null,
    "refs": {
      "Filter$Name": "<p>Name of the filter. Filter names are case-sensitive.</p>"
    }
  },
  "FilterValue": {
    "base": null,
    "refs": {
      "FilterValues$member": null
    }
  },
  "FilterValues": {
    "base": null,
    "refs": {
      "Filter$Values": "<p>The value of the filter, which is case-sensitive. You can only specify one value for the filter.</p>"
    }
  },
  "Filters": {
    "base": null,
    "refs": {
      "ListLicenseConfigurationsRequest$Filters": "<p>Filters to scope the results. The following filters and logical operators are supported:</p> <ul> <li> <p> <code>licenseCountingType</code> - The dimension for which licenses are counted. Possible values are <code>vCPU</code> | <code>Instance</code> | <code>Core</code> | <code>Socket</code>. Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p> </li> <li> <p> <code>enforceLicenseCount</code> - A Boolean value that indicates whether hard license enforcement is used. Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p> </li> <li> <p> <code>usagelimitExceeded</code> - A Boolean value that indicates whether the available licenses have been exceeded. Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p> </li> </ul>",
      "ListLicenseConversionTasksRequest$Filters": "<p> Filters to scope the results. Valid filters are <code>ResourceArns</code> and <code>Status</code>. </p>",
      "ListUsageForLicenseConfigurationRequest$Filters": "<p>Filters to scope the results. The following filters and logical operators are supported:</p> <ul> <li> <p> <code>resourceArn</code> - The ARN of the license configuration resource. Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p> </li> <li> <p> <code>resourceType</code> - The resource type (<code>EC2_INSTANCE</code> | <code>EC2_HOST</code> | <code>EC2_AMI</code> | <code>SYSTEMS_MANAGER_MANAGED_INSTANCE</code>). Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p> </li> <li> <p> <code>resourceAccount</code> - The ID of the account that owns the resource. Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p> </li> </ul>"
    }
  },
  "GetAccessTokenRequest": {
    "base": null,

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```
"refs": {
}
},
"GetAccessTokenResponse": {
  "base": null,
  "refs": {
  }
},
"GetGrantRequest": {
  "base": null,
  "refs": {
  }
},
"GetGrantResponse": {
  "base": null,
  "refs": {
  }
},
"GetLicenseConfigurationRequest": {
  "base": null,
  "refs": {
  }
},
"GetLicenseConfigurationResponse": {
  "base": null,
  "refs": {
  }
},
"GetLicenseConversionTaskRequest": {
  "base": null,
  "refs": {
  }
},
"GetLicenseConversionTaskResponse": {
  "base": null,
  "refs": {
  }
},
"GetLicenseManagerReportGeneratorRequest": {
  "base": null,
  "refs": {
  }
},
"GetLicenseManagerReportGeneratorResponse": {
  "base":
null,
  "refs": {
  }
}
```

```

},
"GetLicenseRequest": {
  "base": null,
  "refs": {
  }
},
"GetLicenseResponse": {
  "base": null,
  "refs": {
  }
},
"GetLicenseUsageRequest": {
  "base": null,
  "refs": {
  }
},
"GetLicenseUsageResponse": {
  "base": null,
  "refs": {
  }
},
"GetServiceSettingsRequest": {
  "base": null,
  "refs": {
  }
},
"GetServiceSettingsResponse": {
  "base": null,
  "refs": {
  }
},
"Grant": {
  "base": "<p>Describes a grant.</p>",
  "refs": {
    "GetGrantResponse$Grant": "<p>Grant details.</p>",
    "GrantList$member": null
  }
},
"GrantList": {
  "base": null,
  "refs": {
    "ListDistributedGrantsResponse$Grants": "<p>Distributed grant details.</p>",
    "ListReceivedGrantsForOrganizationResponse$Grants": "<p>Lists the grants the organization has received.</p>",
    "ListReceivedGrantsResponse$Grants":
"<p>Received grant details.</p>"
  }
},

```

```

"GrantStatus": {
  "base": null,
  "refs": {
    "AcceptGrantResponse$Status": "<p>Grant status.</p>",
    "CreateGrantResponse$Status": "<p>Grant status.</p>",
    "CreateGrantVersionRequest$Status": "<p>Grant status.</p>",
    "CreateGrantVersionResponse$Status": "<p>Grant status.</p>",
    "DeleteGrantResponse$Status": "<p>Grant status.</p>",
    "Grant$GrantStatus": "<p>Grant status.</p>",
    "RejectGrantResponse$Status": "<p>Grant status.</p>"
  }
},
"GrantedLicense": {
  "base": "<p>Describes a license that is granted to a grantee.</p>",
  "refs": {
    "GrantedLicenseList$member": null
  }
},
"GrantedLicenseList": {
  "base": null,
  "refs": {
    "ListReceivedLicensesForOrganizationResponse$Licenses": "<p>Lists the licenses the organization has received.</p>",
    "ListReceivedLicensesResponse$Licenses": "<p>Received license details.</p>"
  }
},
"ISO8601DateTime": {
  "base": null,
  "refs": {
    "CheckoutBorrowLicenseResponse$IssuedAt": "<p>Date and time at which the license checkout is issued.</p>",
    "CheckoutBorrowLicenseResponse$Expiration": "<p>Date and time at which the license checkout expires.</p>",
    "CheckoutLicenseResponse$IssuedAt": "<p>Date and time at which the license checkout is issued.</p>",
    "CheckoutLicenseResponse$Expiration": "<p>Date and time at which the license checkout expires.</p>",
    "DatetimeRange$Begin": "<p>Start of the time range.</p>",
    "DatetimeRange$End": "<p>End of the time range.</p>",
    "DeleteLicenseResponse$DeletionDate": "<p>Date when the license is deleted.</p>",
    "ExtendLicenseConsumptionResponse$Expiration": "<p>Date and time at which the license consumption expires.</p>",
    "GrantedLicense$CreateTime": "<p>Creation time of the granted license.</p>",
    "License$CreateTime": "<p>License creation time.</p>",
    "TokenData$ExpirationTime": "<p>Token expiration time, in ISO8601-UTC format.</p>"
  }
},
"Integer": {

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"base": null,
"refs": {
  "CreateTokenRequest$ExpirationInDays": "<p>Token expiration, in days, counted from token creation. The
default is 365 days.</p>",
  "ReportFrequency$value": "<p>Number of times within the frequency period that a report is generated. The
only supported value is <code>1</code>.</p>"
}
},
"InvalidParameterValueException": {
  "base": "<p>One or more parameter values are not valid.</p>",
  "refs": {
  }
},
"InvalidResourceStateException": {
  "base": "<p>License Manager cannot allocate a license to a resource because of its state. </p> <p>For example,
you cannot allocate a license to an instance in the process of shutting down.</p>",
  "refs": {
  }
},
"InventoryFilter": {
  "base": "<p>An inventory filter.</p>",
  "refs": {

"InventoryFilterList$member": null
}
},
"InventoryFilterCondition": {
  "base": null,
  "refs": {
    "InventoryFilter$Condition": "<p>Condition of the filter.</p>"
  }
},
"InventoryFilterList": {
  "base": null,
  "refs": {
    "ListResourceInventoryRequest$Filters": "<p>Filters to scope the results. The following filters and logical
operators are supported:</p> <ul> <li> <p> <code>account_id</code> - The ID of the Amazon Web Services
account that owns the resource. Logical operators are <code>EQUALS</code> |
<code>NOT_EQUALS</code>.</p> </li> <li> <p> <code>application_name</code> - The name of the
application. Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>.</p> </li> <li> <p>
<code>license_included</code> - The type of license included. Logical operators are <code>EQUALS</code> |
<code>NOT_EQUALS</code>. Possible values are <code>sql-server-enterprise</code> | <code>sql-server-
standard</code> | <code>sql-server-web</code>
| <code>windows-server-datacenter</code>.</p> </li> <li> <p> <code>platform</code> - The platform of the
resource. Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>.</p> </li> <li> <p>
<code>resource_id</code> - The ID of the resource. Logical operators are <code>EQUALS</code> |
<code>NOT_EQUALS</code>.</p> </li> <li> <p> <code>tag:&lt;key&gt;</code> - The key/value combination of
a tag assigned to the resource. Logical operators are <code>EQUALS</code> (single account) or

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<code>EQUALS</code> | <code>NOT_EQUALS</code> (cross account).</p> </li> </ul>"
}
},
"Issuer": {
  "base": "<p>Details about the issuer of a license.</p>",
  "refs": {
    "CreateLicenseRequest$Issuer": "<p>License issuer.</p>",
    "CreateLicenseVersionRequest$Issuer": "<p>License issuer.</p>"
  }
},
"IssuerDetails": {
  "base": "<p>Details associated with the issuer of a license.</p>",
  "refs": {
    "GrantedLicense$Issuer": "<p>Granted
license issuer.</p>",
    "License$Issuer": "<p>License issuer.</p>"
  }
},
"License": {
  "base": "<p>Software license that is managed in License Manager.</p>",
  "refs": {
    "GetLicenseResponse$License": "<p>License details.</p>",
    "LicenseList$member": null
  }
},
"LicenseConfiguration": {
  "base": "<p>A license configuration is an abstraction of a customer license agreement that can be consumed and
enforced by License Manager. Components include specifications for the license type (licensing by instance, socket,
CPU, or vCPU), allowed tenancy (shared tenancy, Dedicated Instance, Dedicated Host, or all of these), host affinity
(how long a VM must be associated with a host), and the number of licenses purchased and used.</p>",
  "refs": {
    "LicenseConfigurations$member": null
  }
},
"LicenseConfigurationAssociation": {
  "base": "<p>Describes an association with a license configuration.</p>",
  "refs": {
    "LicenseConfigurationAssociations$member": null
  }
},
"LicenseConfigurationAssociations": {
  "base": null,
  "refs": {
    "ListAssociationsForLicenseConfigurationResponse$LicenseConfigurationAssociations": "<p>Information
about the associations for the license configuration.</p>"
  }
},
"LicenseConfigurationStatus": {

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    "base": null,
    "refs": {
      "UpdateLicenseConfigurationRequest$LicenseConfigurationStatus": "<p>New status of the license
configuration.</p>"
    }
  },
  "LicenseConfigurationUsage": {
    "base": "<p>Details about the usage of a resource associated with a license configuration.</p>",
    "refs": {
      "LicenseConfigurationUsageList$member": null
    }
  },
  "LicenseConfigurationUsageList": {
    "base": null,
    "refs": {
      "ListUsageForLicenseConfigurationResponse$LicenseConfigurationUsageList": "<p>Information about the
license configurations.</p>"
    }
  },
  "LicenseConfigurations": {
    "base": null,
    "refs": {
      "ListLicenseConfigurationsResponse$LicenseConfigurations": "<p>Information about the license
configurations.</p>"
    }
  },
  "LicenseConversionContext": {
    "base": "<p>Information about a license type conversion task.</p>",
    "refs": {
      "CreateLicenseConversionTaskForResourceRequest$SourceLicenseContext": "<p>Information that identifies
the license type you are converting from. For the structure of the source license, see <a
href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/conversion-procedures.html#conversion-
cli\">Convert a license type using the CLI </a> in the <i>License Manager User Guide</i>.</p>",
      "CreateLicenseConversionTaskForResourceRequest$DestinationLicenseContext": "<p>Information that
identifies the license type you are converting to. For the structure of the destination license, see <a
href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/conversion-procedures.html#conversion-
cli\">Convert
a license type using the CLI </a> in the <i>License Manager User Guide</i>.</p>",
      "GetLicenseConversionTaskResponse$SourceLicenseContext": "<p>Information about the license type
converted from.</p>",
      "GetLicenseConversionTaskResponse$DestinationLicenseContext": "<p>Information about the license type
converted to.</p>",
      "LicenseConversionTask$SourceLicenseContext": "<p>Information about the license type this conversion task
converted from.</p>",
      "LicenseConversionTask$DestinationLicenseContext": "<p>Information about the license type this conversion
task converted to.</p>"
    }
  }
}

```

```

},
"LicenseConversionTask": {
  "base": "<p>Information about a license type conversion task.</p>",
  "refs": {
    "LicenseConversionTasks$member": null
  }
},
"LicenseConversionTaskId": {
  "base": null,
  "refs": {
    "CreateLicenseConversionTaskForResourceResponse$LicenseConversionTaskId":
"<p>The ID of the created license type conversion task.</p>",
    "GetLicenseConversionTaskRequest$LicenseConversionTaskId": "<p>ID of the license type conversion task to
retrieve information on.</p>",
    "GetLicenseConversionTaskResponse$LicenseConversionTaskId": "<p>ID of the license type conversion
task.</p>",
    "LicenseConversionTask$LicenseConversionTaskId": "<p>The ID of the license type conversion task.</p>"
  }
},
"LicenseConversionTaskStatus": {
  "base": null,
  "refs": {
    "GetLicenseConversionTaskResponse$Status": "<p>Status of the license type conversion task.</p>",
    "LicenseConversionTask$Status": "<p>The status of the conversion task.</p>"
  }
},
"LicenseConversionTasks": {
  "base": null,
  "refs": {
    "ListLicenseConversionTasksResponse$LicenseConversionTasks": "<p>Information about the license
configuration tasks for your account.</p>"
  }
},
"LicenseCountingType": {
  "base": null,
  "refs": {
    "CreateLicenseConfigurationRequest$LicenseCountingType": "<p>Dimension used to track the license
inventory.</p>",
    "GetLicenseConfigurationResponse$LicenseCountingType": "<p>Dimension for which the licenses are
counted.</p>",
    "LicenseConfiguration$LicenseCountingType": "<p>Dimension to use to track the license inventory.</p>"
  }
},
"LicenseDeletionStatus": {
  "base": null,
  "refs": {
    "DeleteLicenseResponse$Status": "<p>License status.</p>"
  }
}

```



```

    }
  },
  "LicenseList": {
    "base": null,
    "refs": {
      "ListLicenseVersionsResponse$Licenses": "<p>License details.</p>",
      "ListLicensesResponse$Licenses": "<p>License details.</p>"
    }
  },
  "LicenseOperationFailure": {
    "base": "<p>Describes the failure of a license operation.</p>",
    "refs": {
      "LicenseOperationFailureList$member": null
    }
  },
  "LicenseOperationFailureList": {
    "base":
null,
    "refs": {
      "ListFailuresForLicenseConfigurationOperationsResponse$LicenseOperationFailureList": "<p>License
configuration operations that failed.</p>"
    }
  },
  "LicenseSpecification": {
    "base": "<p>Details for associating a license configuration with a resource.</p>",
    "refs": {
      "LicenseSpecifications$member": null
    }
  },
  "LicenseSpecifications": {
    "base": null,
    "refs": {
      "ListLicenseSpecificationsForResourceResponse$LicenseSpecifications": "<p>License configurations
associated with a resource.</p>",
      "UpdateLicenseSpecificationsForResourceRequest$AddLicenseSpecifications": "<p>ARNs of the license
configurations to add.</p>",
      "UpdateLicenseSpecificationsForResourceRequest$RemoveLicenseSpecifications": "<p>ARNs of the license
configurations to remove.</p>"
    }
  },
  "LicenseStatus": {
    "base": null,
    "refs": {
      "CreateLicenseResponse$Status": "<p>License status.</p>",
      "CreateLicenseVersionRequest$Status": "<p>License status.</p>",
      "CreateLicenseVersionResponse$Status": "<p>License status.</p>",
      "GrantedLicense$Status": "<p>Granted license status.</p>",
      "License$Status": "<p>License status.</p>"
    }
  }
}

```

```

    }
  },
  "LicenseUsage": {
    "base": "<p>Describes the entitlement usage associated with a license.</p>",
    "refs": {
      "GetLicenseUsageResponse$LicenseUsage": "<p>License usage details.</p>"
    }
  },
  "LicenseUsageException": {
    "base": "<p>You do not have enough licenses available to support a new resource launch.</p>",
    "refs": {
    }
  },
  "ListAssociationsForLicenseConfigurationRequest": {
    "base": null,
    "refs": {
    }
  },
  "ListAssociationsForLicenseConfigurationResponse": {
    "base": null,
    "refs": {
    }
  },
  "ListDistributedGrantsRequest": {
    "base": null,
    "refs": {
    }
  },
  "ListDistributedGrantsResponse":
  {
    "base": null,
    "refs": {
    }
  },
  "ListFailuresForLicenseConfigurationOperationsRequest": {
    "base": null,
    "refs": {
    }
  },
  "ListFailuresForLicenseConfigurationOperationsResponse": {
    "base": null,
    "refs": {
    }
  },
  "ListLicenseConfigurationsRequest": {
    "base": null,
    "refs": {
    }
  }

```

```

},
"ListLicenseConfigurationsResponse": {
  "base": null,
  "refs": {
  }
},
"ListLicenseConversionTasksRequest": {
  "base": null,
  "refs": {
  }
},
"ListLicenseConversionTasksResponse": {
  "base": null,
  "refs": {
  }
},
"ListLicenseManagerReportGeneratorsRequest": {
  "base": null,
  "refs": {
  }
},
"ListLicenseManagerReportGeneratorsResponse": {
  "base": null,
  "refs": {
  }
},
"ListLicenseSpecificationsForResourceRequest": {
  "base": null,
  "refs": {
  }
},
"ListLicenseSpecificationsForResourceResponse":
{
  "base": null,
  "refs": {
  }
},
"ListLicenseVersionsRequest": {
  "base": null,
  "refs": {
  }
},
"ListLicenseVersionsResponse": {
  "base": null,
  "refs": {
  }
},
"ListLicensesRequest": {

```

```
"base": null,
"refs": {
}
},
>ListLicensesResponse": {
"base": null,
"refs": {
}
},
>ListReceivedGrantsForOrganizationRequest": {
"base": null,
"refs": {
}
},
>ListReceivedGrantsForOrganizationResponse": {
"base": null,
"refs": {
}
},
>ListReceivedGrantsRequest": {
"base": null,
"refs": {
}
},
>ListReceivedGrantsResponse": {
"base": null,
"refs": {
}
},
>ListReceivedLicensesForOrganizationRequest": {
"base": null,
"refs": {
}
},
>ListReceivedLicensesForOrganizationResponse": {
"base": null,
"refs": {
}
},
>ListReceivedLicensesRequest":
{
"base": null,
"refs": {
}
},
>ListReceivedLicensesResponse": {
"base": null,
"refs": {
```

```
}
},
"ListResourceInventoryRequest": {
  "base": null,
  "refs": {
  }
},
"ListResourceInventoryResponse": {
  "base": null,
  "refs": {
  }
},
"ListTagsForResourceRequest": {
  "base": null,
  "refs": {
  }
},
"ListTagsForResourceResponse": {
  "base": null,
  "refs": {
  }
},
"ListTokensRequest": {
  "base": null,
  "refs": {
  }
},
"ListTokensResponse": {
  "base": null,
  "refs": {
  }
},
"ListUsageForLicenseConfigurationRequest": {
  "base": null,
  "refs": {
  }
},
"ListUsageForLicenseConfigurationResponse": {
  "base": null,
  "refs": {
  }
},
"Location": {
  "base": null,
  "refs": {
    "RedirectException$Location": null
  }
},
},
```

```

"Long":
{
  "base": null,
  "refs": {
    "Entitlement$MaxCount": "<p>Maximum entitlement count. Use if the unit is not None.</p>"
  }
},
"ManagedResourceSummary": {
  "base": "<p>Summary information about a managed resource.</p>",
  "refs": {
    "ManagedResourceSummaryList$member": null
  }
},
"ManagedResourceSummaryList": {
  "base": null,
  "refs": {
    "GetLicenseConfigurationResponse$ManagedResourceSummaryList": "<p>Summaries of the managed
resources.</p>",
    "LicenseConfiguration$ManagedResourceSummaryList": "<p>Summaries for managed resources.</p>"
  }
},
"MaxSize100": {
  "base": null,
  "refs": {
    "ListDistributedGrantsRequest$MaxResults": "<p>Maximum number of results to return in a single call.</p>",
    "ListLicenseManagerReportGeneratorsRequest$MaxResults": "<p>Maximum number of results to return in a
single call.</p>",
    "ListLicenseVersionsRequest$MaxResults": "<p>Maximum
number of results to return in a single call.</p>",
    "ListLicensesRequest$MaxResults": "<p>Maximum number of results to return in a single call.</p>",
    "ListReceivedGrantsForOrganizationRequest$MaxResults": "<p>Maximum number of results to return in a
single call.</p>",
    "ListReceivedGrantsRequest$MaxResults": "<p>Maximum number of results to return in a single call.</p>",
    "ListReceivedLicensesForOrganizationRequest$MaxResults": "<p>Maximum number of results to return in a
single call.</p>",
    "ListReceivedLicensesRequest$MaxResults": "<p>Maximum number of results to return in a single call.</p>",
    "ListTokensRequest$MaxResults": "<p>Maximum number of results to return in a single call.</p>"
  }
},
"MaxSize3StringList": {
  "base": null,
  "refs": {
    "CreateTokenRequest$TokenProperties": "<p>Data specified by the caller to be included in the JWT token. The
data is mapped to the amr claim of the JWT token.</p>",

    "GetAccessTokenRequest$TokenProperties": "<p>Token properties to validate against those present in the JWT
token.</p>",
    "TokenData$TokenProperties": "<p>Data specified by the caller.</p>"
  }
}

```

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    }
  },
  "Message": {
    "base": null,
    "refs": {
      "AccessDeniedException$Message": null,
      "AuthorizationException$Message": null,
      "ConflictException$Message": null,
      "EntitlementNotAllowedException$Message": null,
      "FailedDependencyException$Message": null,
      "FilterLimitExceededException$Message": null,
      "InvalidParameterValueException$Message": null,
      "InvalidResourceStateException$Message": null,
      "LicenseUsageException$Message": null,
      "NoEntitlementsAllowedException$Message": null,
      "RateLimitExceededException$Message": null,
      "RedirectException$Message": null,
      "ResourceLimitExceededException$Message": null,
      "ResourceNotFoundException$Message": null,
      "ServerInternalException$Message":
null,
      "UnsupportedDigitalSignatureMethodException$Message": null,
      "ValidationException$Message": null
    }
  },
  "Metadata": {
    "base": "<p>Describes key/value pairs.</p>",
    "refs": {
      "MetadataList$member": null
    }
  },
  "MetadataList": {
    "base": null,
    "refs": {
      "CheckoutBorrowLicenseRequest$CheckoutMetadata": "<p>Information about constraints.</p>",
      "CheckoutBorrowLicenseResponse$CheckoutMetadata": "<p>Information about constraints.</p>",
      "CreateLicenseRequest$LicenseMetadata": "<p>Information about the license.</p>",
      "CreateLicenseVersionRequest$LicenseMetadata": "<p>Information about the license.</p>",
      "GrantedLicense$LicenseMetadata": "<p>Granted license metadata.</p>",
      "License$LicenseMetadata": "<p>License metadata.</p>",
      "LicenseOperationFailure$MetadataList": "<p>Reserved.</p>"
    }
  },
  "NoEntitlementsAllowedException": {
    "base": "<p>There are no entitlements found for this license, or the entitlement maximum count is reached.</p>",
    "refs": {
    }
  }
}

```

```

},
"Options": {
  "base": "<p>The options you can specify when you create a new version of a grant, such as activation override
behavior. For more information, see <a href=\"https://docs.aws.amazon.com/license-
manager/latest/userguide/granted-licenses.html\">Granted licenses in License Manager</a> in the <i>License
Manager User Guide</i>.</p>",
  "refs": {
    "CreateGrantVersionRequest$Options": "<p>The options specified for the grant.</p>",
    "Grant$Options": "<p>The options specified for the grant.</p>"
  }
},
"OrganizationConfiguration": {
  "base": "<p>Configuration information for Organizations.</p>",
  "refs": {
    "GetServiceSettingsResponse$OrganizationConfiguration": "<p>Indicates whether Organizations is integrated
with License Manager for cross-account discovery.</p>",
    "UpdateServiceSettingsRequest$OrganizationConfiguration":
"<p>Enables integration with Organizations for cross-account discovery.</p>"
  }
},
"PrincipalArnList": {
  "base": null,
  "refs": {
    "CreateGrantRequest$Principals": "<p>The grant principals. You can specify one of the following as an
Amazon Resource Name (ARN):</p> <ul> <li><p>An Amazon Web Services account, which includes only the
account specified.</p> </li> </ul> <ul> <li><p>An organizational unit (OU), which includes all accounts in the
OU.</p> </li> </ul> <ul> <li><p>An organization, which will include all accounts across your organization.</p>
</li> </ul>"
  }
},
"ProductInformation": {
  "base": "<p>Describes product information for a license configuration.</p>",
  "refs": {
    "ProductInformationList$member": null
  }
},
"ProductInformationFilter": {
  "base": "<p>Describes product information filters.</p>",
  "refs": {
    "ProductInformationFilterList$member":
null
  }
},
"ProductInformationFilterList": {
  "base": null,
  "refs": {
    "ProductInformation$ProductInformationFilterList": "<p>A Product information filter consists of a
<code>ProductInformationFilterComparator</code> which is a logical operator, a

```



`ProductInformationFilterName` which specifies the type of filter being declared, and a `ProductInformationFilterValue` that specifies the value to filter on. Accepted values for `ProductInformationFilterName` are listed here along with descriptions and valid options for `ProductInformationFilterComparator`.

The following filters and are supported when the resource type is `SSM_MANAGED`:

- `Application Name` - The name of the application. Logical operator is `EQUALS`.
- `Application Publisher` - The publisher of the application. Logical operator is `EQUALS`.
- `Application Version` - The version of the application. Logical operator is `EQUALS`.
- `Platform Name` - The name of the platform. Logical operator is `EQUALS`.
- `Platform Type` - The platform type. Logical operator is `EQUALS`.
- `Tag:key` - The key of a tag attached to an Amazon Web Services resource you wish to exclude from automated discovery. Logical operator is `NOT_EQUALS`. The key for your tag must be appended to `Tag:` following the example: `Tag:name-of-your-key`. `ProductInformationFilterValue` is optional if you are not using values for the key.
- `AccountId` - The 12-digit ID of an Amazon Web Services account you wish to exclude from automated discovery. Logical operator is `NOT_EQUALS`.
- `License Included` - The type of license included. Logical operators are `EQUALS` and `NOT_EQUALS`. Possible values are: `sql-server-enterprise` | `sql-server-standard` | `sql-server-web` | `windows-server-datacenter`.

The following filters and logical operators are supported when the resource type is `RDS`:

- `Engine Edition` - The edition of the database engine. Logical operator is `EQUALS`. Possible values are: `oracle-ee` | `oracle-se` | `oracle-se1` | `oracle-se2`.
- `License Pack` - The license pack. Logical operator is `EQUALS`. Possible values are: `data guard` | `diagnostic pack sqlt` | `tuning pack sqlt` | `ols` | `olap`.

```

    }
  },
  "ProductInformationList": {
    "base": null,
    "refs": {
      "CreateLicenseConfigurationRequest$ProductInformationList":
"<p>Product information.</p>",
      "GetLicenseConfigurationResponse$ProductInformationList": "<p>Product information.</p>",
      "LicenseConfiguration$ProductInformationList": "<p>Product information.</p>",
      "UpdateLicenseConfigurationRequest$ProductInformationList": "<p>New product information.</p>"
    }
  },
  "ProvisionalConfiguration": {
    "base": "<p>Details about a provisional configuration.</p>",
    "refs": {
      "ConsumptionConfiguration$ProvisionalConfiguration": "<p>Details about a provisional configuration.</p>"
    }
  },
  "RateLimitExceededException": {
    "base": "<p>Too many requests have been submitted. Try again after a brief wait.</p>",
    "refs": {
  
```

```

},
"ReceivedMetadata": {
  "base": "<p>Metadata associated with received licenses and grants.</p>",
  "refs": {
    "GrantedLicense$ReceivedMetadata": "<p>Granted license received metadata.</p>"
  }
},
"ReceivedStatus": {
  "base": null,
  "refs": {
    "ReceivedMetadata$ReceivedStatus": "<p>Received status.</p>"
  }
},
"RedirectException": {
  "base": "<p>This is not the correct Region for the resource. Try again.</p>",
  "refs": {
  }
},
"RejectGrantRequest": {
  "base": null,
  "refs": {
  }
},
"RejectGrantResponse": {
  "base": null,
  "refs": {
  }
},
"RenewType": {
  "base": null,
  "refs": {
    "ConsumptionConfiguration$RenewType": "<p>Renewal frequency.</p>"
  }
},
"ReportContext": {
  "base": "<p>Details of the license configuration that this generator reports on.</p>",
  "refs": {
    "CreateLicenseManagerReportGeneratorRequest$ReportContext": "<p>Defines the type of license configuration the report generator tracks.</p>",
    "ReportGenerator$ReportContext": "<p>License configuration type for this generator.</p>",
    "UpdateLicenseManagerReportGeneratorRequest$ReportContext":
"<p>The report context.</p>"
  }
},
"ReportFrequency": {
  "base": "<p>Details about how frequently reports are generated.</p>",
  "refs": {
    "CreateLicenseManagerReportGeneratorRequest$ReportFrequency": "<p>Frequency by which reports are

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```

generated. Reports can be generated daily, monthly, or weekly.</p>",
  "ReportGenerator$ReportFrequency": "<p>Details about how frequently reports are generated.</p>",
  "UpdateLicenseManagerReportGeneratorRequest$ReportFrequency": "<p>Frequency by which reports are
generated.</p>"
}
},
"ReportFrequencyType": {
  "base": null,
  "refs": {
    "ReportFrequency$period": "<p>Time period between each report. The period can be daily, weekly, or
monthly.</p>"
  }
},
"ReportGenerator": {
  "base": "<p>Describe the details of a report generator.</p>",
  "refs": {
    "GetLicenseManagerReportGeneratorResponse$ReportGenerator":
"<p>A report generator that creates periodic reports about your license configurations.</p>",
    "ReportGeneratorList$member": null
  }
},
"ReportGeneratorList": {
  "base": null,
  "refs": {
    "ListLicenseManagerReportGeneratorsResponse$ReportGenerators": "<p>A report generator that creates
periodic reports about your license configurations.</p>"
  }
},
"ReportGeneratorName": {
  "base": null,
  "refs": {
    "CreateLicenseManagerReportGeneratorRequest$ReportGeneratorName": "<p>Name of the report
generator.</p>",
    "UpdateLicenseManagerReportGeneratorRequest$ReportGeneratorName": "<p>Name of the report
generator.</p>"
  }
},
"ReportType": {
  "base": null,
  "refs": {
    "ReportTypeList$member": null
  }
},
"ReportTypeList": {
  "base": null,
  "refs": {
    "CreateLicenseManagerReportGeneratorRequest$Type": "<p>Type of reports to generate. The following report
types an

```

be generated:

- License configuration report - Reports the number and details of consumed licenses for a license configuration.
- Resource report - Reports the tracked licenses and resource consumption for a license configuration.

"ReportGenerator\$ReportType": "Type of reports that are generated.",

"UpdateLicenseManagerReportGeneratorRequest\$Type": "Type of reports to generate. The following report types are supported:

- License configuration report - Reports the number and details of consumed licenses for a license configuration.
- Resource report - Reports the tracked licenses and resource consumption for a license configuration.

```
}
},
"ResourceInventory": {
  "base": "Details about a resource.",
  "refs": {
    "ResourceInventoryList$member": null
  }
},
"ResourceInventoryList": {
  "base": null,
  "refs": {
    "ListResourceInventoryResponse$ResourceInventoryList": "Information about the resources."
  }
},
"ResourceLimitExceededException": {
  "base": "Your resource limits have been exceeded.",
  "refs": {
  }
},
"ResourceNotFoundException": {
  "base": "The resource cannot be found.",
  "refs": {
  }
},
"ResourceType": {
  "base": null,
  "refs": {
    "ConsumedLicenseSummary$ResourceType": "Resource type of the resource consuming a license.",
    "LicenseConfigurationAssociation$ResourceType": "Type of server resource.",
    "LicenseConfigurationUsage$ResourceType": "Type of resource.",
    "LicenseOperationFailure$ResourceType": "Resource type.",
    "ManagedResourceSummary$ResourceType": "Type of resource associated with a license.",
    "ResourceInventory$ResourceType": "Type of resource."
  }
},
"S3Location": {
  "base":
  "Details of the S3 bucket that report generator reports are published to.",
  "refs": {
    "ReportGenerator$S3Location": "Details of the S3 bucket that report generator reports are published
```

```

to.</p>"
  }
},
"ServerInternalException": {
  "base": "<p>The server experienced an internal error. Try again.</p>",
  "refs": {
  }
},
"SignedToken": {
  "base": null,
  "refs": {
    "CheckoutBorrowLicenseResponse$SignedToken": "<p>Signed token.</p>",
    "CheckoutLicenseResponse$SignedToken": "<p>Signed token.</p>"
  }
},
"StatusReasonMessage": {
  "base": null,
  "refs": {
    "CreateGrantVersionRequest$StatusReason": "<p>Grant status reason.</p>",
    "DeleteGrantRequest$StatusReason": "<p>The Status reason for the delete request.</p>",
    "Grant$StatusReason": "<p>Grant status reason.</p>",
    "ReceivedMetadata$ReceivedStatusReason": "<p>Received status reason.</p>"
  }
},
"String": {
  "base": null,
  "refs": {
    "AcceptGrantResponse$Version": "<p>Grant version.</p>",
    "CheckInLicenseRequest$LicenseConsumptionToken": "<p>License consumption token.</p>",
    "CheckInLicenseRequest$Beneficiary": "<p>License beneficiary.</p>",
    "CheckoutBorrowLicenseRequest$NodeId": "<p>Node ID.</p>",
    "CheckoutBorrowLicenseResponse$LicenseConsumptionToken": "<p>License consumption token.</p>",
    "CheckoutBorrowLicenseResponse$NodeId": "<p>Node ID.</p>",
    "CheckoutLicenseRequest$ProductSKU": "<p>Product SKU.</p>",
    "CheckoutLicenseRequest$KeyFingerprint": "<p>Key fingerprint identifying the license.</p>",
    "CheckoutLicenseRequest$Beneficiary": "<p>License beneficiary.</p>",
    "CheckoutLicenseRequest$NodeId": "<p>Node ID.</p>",
    "CheckoutLicenseResponse$LicenseConsumptionToken": "<p>License consumption token.</p>",
    "CheckoutLicenseResponse$NodeId": "<p>Node ID.</p>",
    "CheckoutLicenseResponse$LicenseArn":
"<p>Amazon Resource Name (ARN) of the checkout license.</p>",
    "CreateGrantRequest$GrantName": "<p>Grant name.</p>",
    "CreateGrantRequest$HomeRegion": "<p>Home Region of the grant.</p>",
    "CreateGrantResponse$Version": "<p>Grant version.</p>",
    "CreateGrantVersionRequest$GrantName": "<p>Grant name.</p>",
    "CreateGrantVersionRequest$SourceVersion": "<p>Current version of the grant.</p>",
    "CreateGrantVersionResponse$Version": "<p>New version of the grant.</p>",

```

"CreateLicenseConfigurationRequest\$Name": "<p>Name of the license configuration.</p>",

"CreateLicenseConfigurationRequest\$Description": "<p>Description of the license configuration.</p>",

"CreateLicenseConfigurationResponse\$LicenseConfigurationArn": "<p>Amazon Resource Name (ARN) of the license configuration.</p>",

"CreateLicenseManagerReportGeneratorRequest\$Description": "<p>Description of the report generator.</p>",

"CreateLicenseManagerReportGeneratorResponse\$LicenseManagerReportGeneratorArn":

<p>The Amazon Resource Name (ARN) of the new report generator.</p>",

"CreateLicenseRequest\$LicenseName": "<p>License name.</p>",

"CreateLicenseRequest\$ProductName": "<p>Product name.</p>",

"CreateLicenseRequest\$ProductSKU": "<p>Product SKU.</p>",

"CreateLicenseRequest\$HomeRegion": "<p>Home Region for the license.</p>",

"CreateLicenseRequest\$Beneficiary": "<p>License beneficiary.</p>",

"CreateLicenseResponse\$Version": "<p>License version.</p>",

"CreateLicenseVersionRequest\$LicenseName": "<p>License name.</p>",

"CreateLicenseVersionRequest\$ProductName": "<p>Product name.</p>",

"CreateLicenseVersionRequest\$HomeRegion": "<p>Home Region of the license.</p>",

"CreateLicenseVersionRequest\$SourceVersion": "<p>Current version of the license.</p>",

"CreateLicenseVersionResponse\$Version": "<p>New version of the license.</p>",

"CreateTokenResponse\$TokenId":

<p>Token ID.</p>",

"DeleteGrantRequest\$Version": "<p>Current version of the grant.</p>",

"DeleteGrantResponse\$Version": "<p>Grant version.</p>",

"DeleteLicenseConfigurationRequest\$LicenseConfigurationArn": "<p>ID of the license configuration.</p>",

"DeleteLicenseManagerReportGeneratorRequest\$LicenseManagerReportGeneratorArn": "<p>Amazon Resource Name (ARN) of the report generator to be deleted.</p>",

"DeleteLicenseRequest\$SourceVersion": "<p>Current version of the license.</p>",

"DeleteTokenRequest\$TokenId": "<p>Token ID.</p>",

"Entitlement\$Name": "<p>Entitlement name.</p>",

"Entitlement\$Value": "<p>Entitlement resource. Use only if the unit is None.</p>",

"EntitlementData\$Name": "<p>Entitlement data name.</p>",

"EntitlementData\$Value": "<p>Entitlement data value.</p>",

"EntitlementUsage\$Name": "<p>Entitlement usage name.</p>",

"EntitlementUsage\$ConsumedValue":

<p>Resource usage consumed.</p>",

"EntitlementUsage\$MaxCount": "<p>Maximum entitlement usage count.</p>",

"ExtendLicenseConsumptionRequest\$LicenseConsumptionToken": "<p>License consumption token.</p>",

"ExtendLicenseConsumptionResponse\$LicenseConsumptionToken": "<p>License consumption token.</p>",

"FailedDependencyException\$ErrorCode": null,

"GetGrantRequest\$Version": "<p>Grant version.</p>",

"GetLicenseConfigurationRequest\$LicenseConfigurationArn": "<p>Amazon Resource Name (ARN) of the license configuration.</p>",

"GetLicenseConfigurationResponse\$LicenseConfigurationId": "<p>Unique ID for the license configuration.</p>",

"GetLicenseConfigurationResponse\$LicenseConfigurationArn": "<p>Amazon Resource Name (ARN) of the license configuration.</p>",

"GetLicenseConfigurationResponse\$Name": "<p>Name of the license configuration.</p>",

"GetLicenseConfigurationResponse\$Description": "<p>Description of the license

configuration.</p>",

"GetLicenseConfigurationResponse\$Status": "<p>License configuration status.</p>",

"GetLicenseConfigurationResponse\$OwnerAccountId": "<p>Account ID of the owner of the license configuration.</p>",

"GetLicenseConversionTaskResponse\$ResourceArn": "<p>Amazon Resource Names (ARN) of the resources the license conversion task is associated with.</p>",

"GetLicenseConversionTaskResponse\$StatusMessage": "<p>The status message for the conversion task.</p>",

"GetLicenseManagerReportGeneratorRequest\$LicenseManagerReportGeneratorArn": "<p>Amazon Resource Name (ARN) of the report generator.</p>",

"GetLicenseRequest\$Version": "<p>License version.</p>",

"GetServiceSettingsResponse\$S3BucketArn": "<p>Regional S3 bucket path for storing reports, license trail event data, discovery data, and so on.</p>",

"GetServiceSettingsResponse\$SnsTopicArn": "<p>SNS topic configured to receive notifications from License Manager.</p>",

"GetServiceSettingsResponse\$LicenseManagerResourceShareArn": "<p>Amazon Resource Name (ARN) of the resource share. The License Manager management account provides member accounts with access to this share.</p>",

"Grant\$GrantName": "<p>Grant name.</p>",

"Grant\$HomeRegion": "<p>Home Region of the grant.</p>",

"Grant\$Version": "<p>Grant version.</p>",

"GrantedLicense\$LicenseName": "<p>License name.</p>",

"GrantedLicense\$ProductName": "<p>Product name.</p>",

"GrantedLicense\$ProductSKU": "<p>Product SKU.</p>",

"GrantedLicense\$HomeRegion": "<p>Home Region of the granted license.</p>",

"GrantedLicense\$Beneficiary": "<p>Granted license beneficiary.</p>",

"GrantedLicense\$Version": "<p>Version of the granted license.</p>",

"InventoryFilter\$Name": "<p>Name of the filter.</p>",

"InventoryFilter\$Value": "<p>Value of the filter.</p>",

"Issuer\$Name": "<p>Issuer name.</p>",

"Issuer\$SignKey":

<p>Asymmetric KMS key from Key Management Service. The KMS key must have a key usage of sign and verify, and support the RSASSA-PSS SHA-256 signing algorithm.</p>",

"IssuerDetails\$Name": "<p>Issuer name.</p>",

"IssuerDetails\$SignKey": "<p>Asymmetric KMS key from Key Management Service. The KMS key must have a key usage of sign and verify, and support the RSASSA-PSS SHA-256 signing algorithm.</p>",

"IssuerDetails\$KeyFingerprint": "<p>Issuer key fingerprint.</p>",

"License\$LicenseName": "<p>License name.</p>",

"License\$ProductName": "<p>Product name.</p>",

"License\$ProductSKU": "<p>Product SKU.</p>",

"License\$HomeRegion": "<p>Home Region of the license.</p>",

"License\$Beneficiary": "<p>License beneficiary.</p>",

"License\$Version": "<p>License version.</p>",

"LicenseConfiguration\$LicenseConfigurationId": "<p>Unique ID of the license configuration.</p>",

"LicenseConfiguration\$LicenseConfigurationArn":

<p>Amazon Resource Name (ARN) of the license configuration.</p>",

"LicenseConfiguration\$Name": "<p>Name of the license configuration.</p>",

"LicenseConfiguration\$Description": "<p>Description of the license configuration.</p>",

"LicenseConfiguration\$Status": "<p>Status of the license configuration.</p>",

"LicenseConfiguration\$OwnerAccountId": "<p>Account ID of the license configuration's owner.</p>",

"LicenseConfigurationAssociation\$ResourceArn": "<p>Amazon Resource Name (ARN) of the resource.</p>",

"LicenseConfigurationAssociation\$ResourceOwnerId": "<p>ID of the Amazon Web Services account that owns the resource consuming licenses.</p>",

"LicenseConfigurationAssociation\$AmiAssociationScope": "<p>Scope of AMI associations. The possible value is <code>cross-account</code>.</p>",

"LicenseConfigurationUsage\$ResourceArn": "<p>Amazon Resource Name (ARN) of the resource.</p>",

"LicenseConfigurationUsage\$ResourceStatus":

<p>Status of the resource.</p>",

"LicenseConfigurationUsage\$ResourceOwnerId": "<p>ID of the account that owns the resource.</p>",

"LicenseConversionTask\$ResourceArn": "<p>The Amazon Resource Name (ARN) of the resource associated with the license type conversion task.</p>",

"LicenseConversionTask\$StatusMessage": "<p>The status message for the conversion task.</p>",

"LicenseOperationFailure\$ResourceArn": "<p>Amazon Resource Name (ARN) of the resource.</p>",

"LicenseOperationFailure\$ErrorMessage": "<p>Error message.</p>",

"LicenseOperationFailure\$OperationName": "<p>Name of the operation.</p>",

"LicenseOperationFailure\$ResourceOwnerId": "<p>ID of the Amazon Web Services account that owns the resource.</p>",

"LicenseOperationFailure\$OperationRequestedBy": "<p>The requester is \"License Manager Automated Discovery\".</p>",

"LicenseSpecification\$LicenseConfigurationArn": "<p>Amazon Resource Name (ARN) of the license configuration.</p>",

"LicenseSpecification\$AmiAssociationScope": "<p>Scope of AMI associations. The possible value is <code>cross-account</code>.</p>",

"ListAssociationsForLicenseConfigurationRequest\$LicenseConfigurationArn": "<p>Amazon Resource Name (ARN) of a license configuration.</p>",

"ListAssociationsForLicenseConfigurationRequest\$NextToken": "<p>Token for the next set of results.</p>",

"ListAssociationsForLicenseConfigurationResponse\$NextToken": "<p>Token for the next set of results.</p>",

"ListDistributedGrantsRequest\$NextToken": "<p>Token for the next set of results.</p>",

"ListDistributedGrantsResponse\$NextToken": "<p>Token for the next set of results.</p>",

"ListFailuresForLicenseConfigurationOperationsRequest\$LicenseConfigurationArn": "<p>Amazon Resource Name of the license configuration.</p>",

"ListFailuresForLicenseConfigurationOperationsRequest\$NextToken": "<p>Token for the next set of results.</p>",

"ListFailuresForLicenseConfigurationOperationsResponse\$NextToken": "<p>Token for the next set of results.</p>",

"ListLicenseConfigurationsRequest\$NextToken": "<p>Token for the next set of results.</p>",

"ListLicenseConfigurationsResponse\$NextToken": "<p>Token for the next set of results.</p>",

"ListLicenseConversionTasksRequest\$NextToken": "<p>Token for the next set of results.</p>",

"ListLicenseConversionTasksResponse\$NextToken": "<p>Token for the next set of results.</p>",

"ListLicenseManagerReportGeneratorsRequest\$NextToken": "<p>Token for the next set of results.</p>",

"ListLicenseManagerReportGeneratorsResponse\$NextToken": "<p>Token for the next set of results.</p>",

"ListLicenseSpecificationsForResourceRequest\$ResourceArn": "<p>Amazon Resource Name (ARN) of a resource that has an associated license configuration.</p>",

"ListLicenseSpecificationsForResourceRequest\$NextToken": "<p>Token for the next set of results.</p>",

"ListLicenseSpecificationsForResourceResponse\$NextToken": "<p>Token for the next set of results.</p>",

"ListLicenseVersionsRequest\$NextToken": "<p>Token for the next set of results.</p>",



"ListLicenseVersionsResponse\$NextToken": "<p>Token for the next set of results.</p>",

"ListLicensesRequest\$NextToken": "<p>Token for the next set of results.</p>",

"ListLicensesResponse\$NextToken": "<p>Token for the next set of results.</p>",

"ListReceivedGrantsForOrganizationRequest\$NextToken": "<p>Token for the next set of results.</p>",

"ListReceivedGrantsForOrganizationResponse\$NextToken": "<p>Token for the next set of results.</p>",

"ListReceivedGrantsRequest\$NextToken": "<p>Token for the next set of results.</p>",

"ListReceivedGrantsResponse\$NextToken": "<p>Token for the next set of results.</p>",

"ListReceivedLicensesForOrganizationRequest\$NextToken": "<p>Token for the next set of results.</p>",

"ListReceivedLicensesForOrganizationResponse\$NextToken": "<p>Token for the next set of results.</p>",

"ListReceivedLicensesRequest\$NextToken": "<p>Token for the next set of results.</p>",

"ListReceivedLicensesResponse\$NextToken": "<p>Token for the next set of results.</p>",

"ListResourceInventoryRequest\$NextToken": "<p>Token for the next set of results.</p>",

"ListResourceInventoryResponse\$NextToken": "<p>Token for the next set of results.</p>",

"ListTagsForResourceRequest\$ResourceArn": "<p>Amazon Resource Name (ARN) of the license configuration.</p>",

"ListTokensRequest\$NextToken": "<p>Token for the next set of results.</p>",

"ListTokensResponse\$NextToken": "<p>Token for the next set of results.</p>",

"ListUsageForLicenseConfigurationRequest\$LicenseConfigurationArn": "<p>Amazon Resource Name (ARN) of the license configuration.</p>",

"ListUsageForLicenseConfigurationRequest\$NextToken": "<p>Token for the next set of results.</p>",

"ListUsageForLicenseConfigurationResponse\$NextToken": "<p>Token for the next set of results.</p>",

"MaxSize3StringList\$member": null,

"Metadata\$Name": "<p>The key name.</p>",

"Metadata\$Value": "<p>The value.</p>",

"ProductInformation\$ResourceType": "<p>Resource type. The possible values are <code>SSM\_MANAGED</code> | <code>RDS</code>.</p>",

"ProductInformationFilter\$ProductInformationFilterName": "<p>Filter name.</p>",

"ProductInformationFilter\$ProductInformationFilterComparator": "<p>Logical operator.</p>",

"RejectGrantResponse\$Version": "<p>Grant version.</p>",

"ReportGenerator\$ReportGeneratorName": "<p>Name of the report generator.</p>",

"ReportGenerator\$LicenseManagerReportGeneratorArn": "<p>Amazon Resource Name (ARN) of the report generator.</p>",

"ReportGenerator\$LastRunStatus": "<p>Status of the last report generation attempt.</p>",

"ReportGenerator\$LastRunFailureReason": "<p>Failure message for the last report generation attempt.</p>",

"ReportGenerator\$LastReportGenerationTime": "<p>Time the last report was generated at.</p>",

"ReportGenerator\$ReportCreatorAccount": "<p>The Amazon Web Services account ID used to create the report generator.</p>",

"ReportGenerator\$Description": "<p>Description of the report generator.</p>",

"ReportGenerator\$CreateTime": "<p>Time the report was created.</p>",

"ResourceInventory\$ResourceId": "<p>ID of the resource.</p>",

"ResourceInventory\$ResourceArn": "<p>Amazon Resource Name (ARN) of the resource.</p>",

"ResourceInventory\$Platform": "<p>Platform of the resource.</p>",

"ResourceInventory\$PlatformVersion": "<p>Platform version of the resource in the inventory.</p>",

"ResourceInventory\$ResourceOwningAccountId": "<p>ID of the account that owns the resource.</p>",

"S3Location\$bucket": "<p>Name of the S3 bucket reports are published to.</p>",

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"S3Location$keyPrefix": "<p>Prefix of the S3 bucket reports are published to.</p>",
  "StringList$member": null,
  "Tag$Key": "<p>Tag key.</p>",
  "Tag$Value": "<p>Tag value.</p>",
  "TagKeyList$member": null,
  "TagResourceRequest$ResourceArn": "<p>Amazon Resource Name (ARN) of the license configuration.</p>",
  "TokenData$TokenId": "<p>Token ID.</p>",
  "TokenData$TokenType": "<p>Type of token generated. The supported value is
<code>REFRESH_TOKEN</code>.</p>",
  "TokenData$LicenseArn": "<p>Amazon Resource Name (ARN) of the license.</p>",
  "TokenData$Status": "<p>Token status. The possible values are <code>AVAILABLE</code> and
<code>DELETED</code>.</p>",
  "UntagResourceRequest$ResourceArn": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
  "UpdateLicenseConfigurationRequest$LicenseConfigurationArn": "<p>Amazon Resource Name (ARN) of the
license configuration.</p>",
  "UpdateLicenseConfigurationRequest$Name":
"<p>New name of the license configuration.</p>",
  "UpdateLicenseConfigurationRequest$Description": "<p>New description of the license configuration.</p>",
  "UpdateLicenseManagerReportGeneratorRequest$LicenseManagerReportGeneratorArn": "<p>Amazon
Resource Name (ARN) of the report generator to update.</p>",
  "UpdateLicenseManagerReportGeneratorRequest$Description": "<p>Description of the report generator.</p>",
  "UpdateLicenseSpecificationsForResourceRequest$ResourceArn": "<p>Amazon Resource Name (ARN) of the
Amazon Web Services resource.</p>",
  "UpdateServiceSettingsRequest$S3BucketArn": "<p>Amazon Resource Name (ARN) of the Amazon S3
bucket where the License Manager information is stored.</p>",
  "UpdateServiceSettingsRequest$SnsTopicArn": "<p>Amazon Resource Name (ARN) of the Amazon SNS
topic used for License Manager alerts.</p>"
}
},
"StringList": {
  "base": null,
  "refs": {
    "CreateLicenseConfigurationRequest$LicenseRules":
"<p>License rules. The syntax is #name=value (for example, #allowedTenancy=EC2-DedicatedHost). The
available rules vary by dimension, as follows.</p> <ul> <li> <p> <code>Cores</code> dimension:
<code>allowedTenancy</code> | <code>licenseAffinityToHost</code> | <code>maximumCores</code> |
<code>minimumCores</code> </p> </li> <li> <p> <code>Instances</code> dimension:
<code>allowedTenancy</code> | <code>maximumCores</code> | <code>minimumCores</code> |
<code>maximumSockets</code> | <code>minimumSockets</code> | <code>maximumVcpus</code> |
<code>minimumVcpus</code> </p> </li> <li> <p> <code>Sockets</code> dimension:
<code>allowedTenancy</code> | <code>licenseAffinityToHost</code> | <code>maximumSockets</code> |
<code>minimumSockets</code> </p> </li> <li> <p> <code>vCPUs</code> dimension:
<code>allowedTenancy</code> | <code>honorVcpuOptimization</code> | <code>maximumVcpus</code> |
<code>minimumVcpus</code> </p> </li> </ul> <p>The unit for <code>licenseAffinityToHost</code>
is days and the range is 1 to 180. The possible values for <code>allowedTenancy</code> are <code>EC2-
Default</code>, <code>EC2-DedicatedHost</code>, and <code>EC2-DedicatedInstance</code>. The possible
values for <code>honorVcpuOptimization</code> are <code>True</code> and <code>False</code>.</p>",

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    "GetLicenseConfigurationResponse$LicenseRules": "<p>License rules.</p>",
    "LicenseConfiguration$LicenseRules": "<p>License rules.</p>",
    "ListLicenseConfigurationsRequest$LicenseConfigurationArns": "<p>Amazon Resource Names (ARN) of the
license configurations.</p>",
    "ListTokensRequest$TokenIds": "<p>Token IDs.</p>",
    "ProductInformationFilter$ProductInformationFilterValue": "<p>Filter value.</p>",
    "UpdateLicenseConfigurationRequest$LicenseRules": "<p>New license rule. The only rule that you can add
after you create a license configuration is licenseAffinityToHost.</p>"
  }
},
"Tag": {
  "base": "<p>Details about a tag
for a license configuration.</p>",
  "refs": {
    "TagList$member": null
  }
},
"TagKeyList": {
  "base": null,
  "refs": {
    "UntagResourceRequest$TagKeys": "<p>Keys identifying the tags to remove.</p>"
  }
},
"TagList": {
  "base": null,
  "refs": {
    "CreateLicenseConfigurationRequest$Tags": "<p>Tags to add to the license configuration.</p>",
    "CreateLicenseManagerReportGeneratorRequest$Tags": "<p>Tags to add to the report generator.</p>",
    "GetLicenseConfigurationResponse$Tags": "<p>Tags for the license configuration.</p>",
    "ListTagsForResourceResponse$Tags": "<p>Information about the tags.</p>",
    "ReportGenerator$Tags": "<p>Tags associated with the report generator.</p>",
    "TagResourceRequest$Tags": "<p>One or more tags.</p>"
  }
},
"TagResourceRequest": {
  "base": null,
  "refs": {
  }
},
"TagResourceResponse": {
  "base": null,
  "refs": {
  }
},
"TokenData": {
  "base": "<p>Describes a token.</p>",
  "refs": {

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    "TokenList$member": null
  }
},
"TokenList": {
  "base": null,
  "refs": {
    "ListTokensResponse$Tokens": "<p>Received token details.</p>"
  }
},
"TokenString": {
  "base": null,
  "refs": {
    "CreateTokenResponse$Token": "<p>Refresh token, encoded as a JWT token.</p>",
    "GetAccessTokenRequest$Token": "<p>Refresh token, encoded as a JWT token.</p>",
    "GetAccessTokenResponse$AccessToken": "<p>Temporary access token.</p>"
  }
},
"TokenType": {
  "base": null,
  "refs": {
    "CreateTokenResponse$TokenType": "<p>Token type.</p>"
  }
},
"UnsupportedDigitalSignatureMethodException": {
  "base": "<p>The digital signature method is unsupported. Try your request again.</p>",
  "refs": {
  }
},
"UntagResourceRequest": {
  "base": null,
  "refs": {
  }
},
"UntagResourceResponse": {
  "base": null,
  "refs": {
  }
},
"UpdateLicenseConfigurationRequest": {
  "base": null,
  "refs": {
  }
},
"UpdateLicenseConfigurationResponse": {
  "base": null,
  "refs": {
  }
}

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},
"UpdateLicenseManagerReportGeneratorRequest": {
  "base": null,
  "refs": {
  }
},
"UpdateLicenseManagerReportGeneratorResponse": {
  "base": null,
  "refs": {
  }
},
"UpdateLicenseSpecificationsForResourceRequest": {
  "base": null,
  "refs": {
  }
},
"UpdateLicenseSpecificationsForResourceResponse": {
  "base": null,
  "refs": {
  }
},
"UpdateServiceSettingsRequest": {
  "base": null,
  "refs": {
  }
},
"UpdateServiceSettingsResponse": {
  "base": null,
  "refs": {
  }
},
"UsageOperation": {
  "base": null,
  "refs": {
    "LicenseConversionContext$UsageOperation": "<p>The Usage operation value
that corresponds to the license type you are converting your resource from. For more information about which
platforms correspond to which usage operation values see <a
href=\"https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/billing-info-fields.html#billing-info\">Sample
data: usage operation by platform </a> </p>"
  }
},
"ValidationException": {
  "base": "<p>The provided input is not valid. Try your request again.</p>",
  "refs": {
  }
}
}

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{
  "testCases": [
    {
      "documentation": "For region af-south-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.af-south-1.amazonaws.com"
        }
      },
      "params": {
        "UseFIPS": false,
        "UseDualStack": false,
        "Region": "af-south-1"
      }
    },
    {
      "documentation": "For region ap-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.ap-east-1.amazonaws.com"
        }
      },
      "params": {
        "UseFIPS": false,
        "UseDualStack": false,
        "Region": "ap-east-1"
      }
    },
    {
      "documentation": "For region ap-northeast-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.ap-northeast-1.amazonaws.com"
        }
      },
      "params": {
        "UseFIPS": false,
        "UseDualStack": false,
        "Region": "ap-northeast-1"
      }
    },
    {
      "documentation": "For region ap-northeast-2 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.ap-northeast-2.amazonaws.com"
        }
      }
    }
  ]
}

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    },
    "params": {
      "UseFIPS": false,
      "UseDualStack": false,
      "Region": "ap-northeast-2"
    }
  },
  {
    "documentation": "For region ap-northeast-3 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager.ap-northeast-3.amazonaws.com"
      }
    },
    "params": {
      "UseFIPS": false,
      "UseDualStack": false,
      "Region": "ap-northeast-3"
    }
  },
  {
    "documentation": "For region ap-south-1 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager.ap-south-1.amazonaws.com"
      }
    },
    "params": {
      "UseFIPS": false,
      "UseDualStack": false,
      "Region": "ap-south-1"
    }
  },
  {
    "documentation": "For region ap-southeast-1 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager.ap-southeast-1.amazonaws.com"
      }
    },
    "params": {
      "UseFIPS": false,
      "UseDualStack":
false,
      "Region": "ap-southeast-1"
    }
  },
  {

```

```

"documentation": "For region ap-southeast-2 with FIPS disabled and DualStack disabled",
"expect": {
  "endpoint": {
    "url": "https://license-manager.ap-southeast-2.amazonaws.com"
  }
},
"params": {
  "UseFIPS": false,
  "UseDualStack": false,
  "Region": "ap-southeast-2"
}
},
{
"documentation": "For region ap-southeast-3 with FIPS disabled and DualStack disabled",
"expect": {
  "endpoint": {
    "url": "https://license-manager.ap-southeast-3.amazonaws.com"
  }
},
"params": {
  "UseFIPS": false,
  "UseDualStack": false,
  "Region": "ap-southeast-3"
}
},
{
"documentation":
"\"For region ca-central-1 with FIPS disabled and DualStack disabled\",
"expect": {
  "endpoint": {
    "url": "https://license-manager.ca-central-1.amazonaws.com"
  }
},
"params": {
  "UseFIPS": false,
  "UseDualStack": false,
  "Region": "ca-central-1"
}
},
{
"documentation": "For region eu-central-1 with FIPS disabled and DualStack disabled",
"expect": {
  "endpoint": {
    "url": "https://license-manager.eu-central-1.amazonaws.com"
  }
},
"params": {
  "UseFIPS": false,

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```

    "UseDualStack": false,
    "Region": "eu-central-1"
  }
},
{
  "documentation": "For region eu-north-1 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint":
  {
    "url": "https://license-manager.eu-north-1.amazonaws.com"
  }
},
  "params": {
    "UseFIPS": false,
    "UseDualStack": false,
    "Region": "eu-north-1"
  }
},
{
  "documentation": "For region eu-south-1 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.eu-south-1.amazonaws.com"
    }
},
  "params": {
    "UseFIPS": false,
    "UseDualStack": false,
    "Region": "eu-south-1"
  }
},
{
  "documentation": "For region eu-west-1 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.eu-west-1.amazonaws.com"
    }
},
  "params":
  {
    "UseFIPS": false,
    "UseDualStack": false,
    "Region": "eu-west-1"
  }
},
{
  "documentation": "For region eu-west-2 with FIPS disabled and DualStack disabled",
  "expect": {

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    "endpoint": {
      "url": "https://license-manager.eu-west-2.amazonaws.com"
    }
  },
  "params": {
    "UseFIPS": false,
    "UseDualStack": false,
    "Region": "eu-west-2"
  }
},
{
  "documentation": "For region eu-west-3 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.eu-west-3.amazonaws.com"
    }
  },
  "params": {
    "UseFIPS": false,
    "UseDualStack": false,
    "Region": "eu-west-3"
  }
},
{
  "documentation": "For region me-south-1 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.me-south-1.amazonaws.com"
    }
  },
  "params": {
    "UseFIPS": false,
    "UseDualStack": false,
    "Region": "me-south-1"
  }
},
{
  "documentation": "For region sa-east-1 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.sa-east-1.amazonaws.com"
    }
  },
  "params": {
    "UseFIPS": false,
    "UseDualStack": false,
    "Region": "sa-east-1"
  }
}

```

```

    }
  },
  {
    "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager.us-east-1.amazonaws.com"
      }
    },
    "params": {
      "UseFIPS": false,
      "UseDualStack": false,
      "Region": "us-east-1"
    }
  },
  {
    "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-fips.us-east-1.amazonaws.com"
      }
    },
    "params": {
      "UseFIPS": true,
      "UseDualStack": false,
      "Region": "us-east-1"
    }
  },
  {
    "documentation": "For region us-east-2 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager.us-east-2.amazonaws.com"
      }
    },
    "params": {
      "UseFIPS": false,
      "UseDualStack": false,
      "Region": "us-east-2"
    }
  },
  {
    "documentation": "For region us-east-2 with FIPS enabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-fips.us-east-2.amazonaws.com"
      }
    }
  }

```

```

    }
  },
  "params": {
    "UseFIPS": true,
    "UseDualStack": false,
    "Region": "us-east-2"
  }
},
{
  "documentation": "For region us-west-1 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.us-west-1.amazonaws.com"
    }
  },
  "params": {
    "UseFIPS": false,
    "UseDualStack": false,
    "Region": "us-west-1"
  }
}
},
{
  "documentation": "For region us-west-1 with FIPS enabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-fips.us-west-1.amazonaws.com"
    }
  },
  "params": {
    "UseFIPS": true,
    "UseDualStack": false,
    "Region": "us-west-1"
  }
},
{
  "documentation": "For region us-west-2 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.us-west-2.amazonaws.com"
    }
  },
  "params": {
    "UseFIPS": false,
    "UseDualStack": false,
    "Region": "us-west-2"
  }
},

```

```

{
  "documentation": "For region us-west-2 with FIPS enabled and DualStack disabled",
  "expect":
  {
    "endpoint": {
      "url": "https://license-manager-fips.us-west-2.amazonaws.com"
    }
  },
  "params": {
    "UseFIPS": true,
    "UseDualStack": false,
    "Region": "us-west-2"
  }
},
{
  "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-fips.us-east-1.api.aws"
    }
  },
  "params": {
    "UseFIPS": true,
    "UseDualStack": true,
    "Region": "us-east-1"
  }
},
{
  "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.us-east-1.api.aws"
    }
  },
  "params": {
    "UseFIPS": false,
    "UseDualStack": true,
    "Region": "us-east-1"
  }
},
{
  "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.cn-north-1.amazonaws.com.cn"
    }
  },

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"params": {
  "UseFIPS": false,
  "UseDualStack": false,
  "Region": "cn-north-1"
}
},
{
  "documentation": "For region cn-northwest-1 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.cn-northwest-1.amazonaws.com.cn"
    }
  },
  "params": {
    "UseFIPS": false,
    "UseDualStack": false,
    "Region": "cn-northwest-1"
  }
},
{
  "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-fips.cn-north-1.api.amazonwebservices.com.cn"
    }
  },
  "params": {
    "UseFIPS": true,
    "UseDualStack": true,
    "Region": "cn-north-1"
  }
},
{
  "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-fips.cn-north-1.amazonaws.com.cn"
    }
  },
  "params": {
    "UseFIPS": true,
    "UseDualStack": false,
    "Region": "cn-north-1"
  }
},
{
  "documentation": "For region cn-north-1 with FIPS disabled

```

and DualStack enabled",

```
"expect": {
  "endpoint": {
    "url": "https://license-manager.cn-north-1.api.amazonwebservices.com.cn"
  }
},
"params": {
  "UseFIPS": false,
  "UseDualStack": true,
  "Region": "cn-north-1"
}
},
{
  "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.us-gov-east-1.amazonaws.com"
    }
  },
  "params": {
    "UseFIPS": false,
    "UseDualStack": false,
    "Region": "us-gov-east-1"
  }
},
{
  "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-fips.us-gov-east-1.amazonaws.com"
    }
  },
  "params": {
    "UseFIPS": true,
    "UseDualStack": false,
    "Region": "us-gov-east-1"
  }
},
{
  "documentation": "For region us-gov-west-1 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.us-gov-west-1.amazonaws.com"
    }
  },
  "params": {
    "UseFIPS": false,
    "UseDualStack": false,
```

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    "Region": "us-gov-west-1"
  }
},
{
  "documentation": "For region us-gov-west-1 with FIPS enabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-fips.us-gov-west-1.amazonaws.com"
    }
  },
  "params": {
    "UseFIPS": true,
    "UseDualStack": false,
    "Region": "us-gov-west-1"
  }
},
{
  "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-fips.us-gov-east-1.api.aws"
    }
  },
  "params": {
    "UseFIPS": true,
    "UseDualStack": true,
    "Region": "us-gov-east-1"
  }
},
{
  "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.us-gov-east-1.api.aws"
    }
  },
  "params": {
    "UseFIPS": false,
    "UseDualStack": true,
    "Region": "us-gov-east-1"
  }
},
{
  "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {

```



```

        "url": "https://license-manager.us-iso-east-1.c2s.ic.gov"
    }
},
"params": {
    "UseFIPS": false,
    "UseDualStack": false,
    "Region": "us-iso-east-1"
}
},
{
    "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
    "expect": {
        "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
    },
    "params": {
        "UseFIPS": true,
        "UseDualStack": true,
        "Region": "us-iso-east-1"
    }
},
{
    "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
    "expect": {
"endpoint": {
        "url": "https://license-manager-fips.us-iso-east-1.c2s.ic.gov"
    }
},
"params": {
        "UseFIPS": true,
        "UseDualStack": false,
        "Region": "us-iso-east-1"
    }
},
{
    "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
    "expect": {
        "error": "DualStack is enabled but this partition does not support DualStack"
    },
    "params": {
        "UseFIPS": false,
        "UseDualStack": true,
        "Region": "us-iso-east-1"
    }
},
{
    "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
    "expect": {

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```

    "endpoint": {
      "url": "https://license-manager.us-isob-east-1.sc2s.sgov.gov"
    }
  },
  "params":
{
  "UseFIPS": false,
  "UseDualStack": false,
  "Region": "us-isob-east-1"
}
},
{
  "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
  "expect": {
    "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
  },
  "params": {
    "UseFIPS": true,
    "UseDualStack": true,
    "Region": "us-isob-east-1"
  }
},
{
  "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-fips.us-isob-east-1.sc2s.sgov.gov"
    }
  },
  "params": {
    "UseFIPS": true,
    "UseDualStack": false,
    "Region": "us-isob-east-1"
  }
},
{
  "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
  "expect": {
    "error": "DualStack is enabled but this partition does not support DualStack"
  },
  "params": {
    "UseFIPS": false,
    "UseDualStack": true,
    "Region": "us-isob-east-1"
  }
},
{
  "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",

```

```

"expect": {
  "endpoint": {
    "url": "https://example.com"
  }
},
"params": {
  "UseFIPS": false,
  "UseDualStack": false,
  "Region": "us-east-1",
  "Endpoint": "https://example.com"
}
},
{
  "documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
  "expect": {
    "endpoint": {
      "url": "https://example.com"
    }
  },
  "params": {
    "UseFIPS": false,
    "UseDualStack": false,
    "Endpoint": "https://example.com"
  }
},
{
  "documentation": "For custom endpoint with fips enabled and dualstack disabled",
  "expect": {
    "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
  },
  "params": {
    "UseFIPS": true,
    "UseDualStack": false,
    "Region": "us-east-1",
    "Endpoint": "https://example.com"
  }
},
{
  "documentation": "For custom endpoint with fips disabled and dualstack enabled",
  "expect": {
    "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
  },
  "params": {
    "UseFIPS": false,
    "UseDualStack": true,
    "Region": "us-east-1",
    "Endpoint": "https://example.com"
  }
}

```

```

    },
    {
      "documentation": "Missing region",
      "expect": {
        "error": "Invalid Configuration: Missing Region"
      }
    }
  ],
  "version": "1.0"
}
{
  "version": "1.0",
  "parameters": {
    "Region": {
      "builtIn": "AWS::Region",
      "required": false,
      "documentation": "The AWS region used to dispatch the request.",
      "type": "String"
    },
    "UseDualStack": {
      "builtIn": "AWS::UseDualStack",
      "required": true,
      "default": false,
      "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-
stack, dispatching the request MAY return an error.",
      "type": "Boolean"
    },
    "UseFIPS": {
      "builtIn": "AWS::UseFIPS",
      "required": true,
      "default": false,
      "documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured
endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
      "type": "Boolean"
    },
    "Endpoint": {
      "builtIn": "SDK::Endpoint",
      "required": false,
      "documentation": "Override the endpoint used to send this request",
      "type": "String"
    }
  },
  "rules": [
    {
      "conditions": [
        {
          "fn": "isSet",

```

```

    "argv": [
      {
        "ref": "Endpoint"
      }
    ]
  },
],
"rules": [
  {
    "conditions": [
      {
        "fn": "booleanEquals",
        "argv": [
          {
            "ref": "UseFIPS"
          },
          true
        ]
      }
    ],
    "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
    "type": "error"
  },
  {
    "conditions": [],
    "rules": [
      {
        "conditions": [
          {
            "fn": "booleanEquals",
            "argv": [
              {
                "ref": "UseDualStack"
              },
              true
            ]
          }
        ],
        "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
        "type": "error"
      },
      {
        "conditions": [],
        "endpoint": {
          "url": {
            "ref": "Endpoint"
          },
        },
      }
    ]
  }
]

```

```

        "properties": {},
        "headers": {}
    },
    "type": "endpoint"
}
],
"type": "tree"
}
],
"type": "tree"
},
{
    "conditions": [],
    "rules": [
        {
            "conditions": [
                {
                    "fn": "isSet",
                    "argv": [
                        {
                            "ref": "Region"
                        }
                    ]
                }
            ],
            "rules": [
                {
                    "conditions": [
                        {
                            "fn": "aws.partition",
                            "argv": [
                                {
                                    "ref": "Region"
                                }
                            ],
                            "assign": "PartitionResult"
                        }
                    ],
                    "rules": [
                        {
                            "conditions": [
                                {
                                    "fn": "booleanEquals",
                                    "argv": [
                                        {
                                            "ref": "UseFIPS"
                                        }
                                    ],
                                }
                            ],
                        }
                    ]
                }
            ]
        }
    ]
}

```

```

        true
      ]
    },
  {
    "fn": "booleanEquals",
    "argv": [
      {
        "ref": "UseDualStack"
      },
      true
    ]
  }
],
"rules": [
  {
    "conditions": [
      {
        "fn": "booleanEquals",
        "argv": [
          true,
          {
            "fn": "getAttr",
            "argv": [
              {
                "ref": "PartitionResult"
              },
              "supportsFIPS"
            ]
          }
        ]
      }
    ],
    "fn": "booleanEquals",
    "argv": [
      true,
      {
        "fn": "getAttr",
        "argv": [
          {
            "ref": "PartitionResult"
          },
          "supportsDualStack"
        ]
      }
    ]
  }
]

```

```

    }
  ],
  "rules": [
    {
      "conditions": [],
      "rules": [
        {
          "conditions": [],
          "endpoint": {
            "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
            "properties": {},
            "headers": {}
          },
          "type": "endpoint"
        }
      ],
      "type": "tree"
    }
  ],
  "type": "tree"
},
{
  "conditions": [],
  "error": "FIPS and DualStack are enabled, but this partition does not support one or
both",
  "type": "error"
},
{
  "conditions": [
    {
      "fn": "booleanEquals",
      "argv": [
        {
          "ref": "UseFIPS"
        },
        true
      ]
    }
  ],
  "rules": [
    {

```



```

"conditions": [
  {
    "fn": "booleanEquals",
    "argv": [
      {
        "fn": "getAttr",
        "argv": [
          {
            "ref": "PartitionResult"
          },
          "supportsFIPS"
        ]
      }
    ]
  },
  true
]
},
"rules": [
  {
    "conditions": [],
    "rules": [
      {
        "conditions": [],
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dnsSuffix}",
          "properties": {},
          "headers": {}
        },
        "type": "endpoint"
      }
    ],
    "type": "tree"
  },
  {
    "conditions": [],
    "error": "FIPS is enabled but this partition does not support FIPS",
    "type": "error"
  }
],
"type": "tree"
},
{

```

```

"conditions": [
  {
    "fn": "booleanEquals",
    "argv": [
      {
        "ref": "UseDualStack"
      },
      true
    ]
  }
],
"rules": [
  {
    "conditions": [
      {
        "fn": "booleanEquals",
        "argv": [
          true,
          {
            "fn": "getAttr",
            "argv": [
              {
                "ref": "PartitionResult"
              },
              "supportsDualStack"
            ]
          }
        ]
      }
    ]
  }
],
"rules": [
  {
    "conditions": [],
    "rules": [
      {
        "conditions": [],
        "endpoint": {
          "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
          "properties": {},
          "headers": {}
        },
        "type": "endpoint"
      }
    ]
  }
],

```

```

        "type": "tree"
    }
],
    "type": "tree"
},
    {
        "conditions": [],
        "error": "DualStack is enabled but this partition does not support DualStack",
        "type": "error"
    }
],
    "type": "tree"
},
    {
        "conditions": [],
        "rules": [
            {
                "conditions": [],
                "endpoint": {
                    "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",
                    "properties": {},

                    "headers": {
                        },
                    "type": "endpoint"
                }
            },
            "type": "tree"
        }
    ],
    "type": "tree"
}
],
    "type": "tree"
},
    {
        "conditions": [],
        "error": "Invalid Configuration: Missing Region",
        "type": "error"
    }
],
    "type": "tree"
}
]
}

```

```

{
  "pagination": {
    "ListLinuxSubscriptionInstances": {
      "input_token": "NextToken",
      "output_token": "NextToken",
      "limit_key": "MaxResults",
      "result_key": "Instances"
    },
    "ListLinuxSubscriptions": {
      "input_token": "NextToken",
      "output_token": "NextToken",
      "limit_key": "MaxResults",
      "result_key": "Subscriptions"
    },
    "ListRegisteredSubscriptionProviders": {
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      "output_token": "NextToken",
      "limit_key": "MaxResults",
      "result_key": "RegisteredSubscriptionProviders"
    }
  }
}
{
  "version": "1.0",
  "examples": {
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}
{
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      "input_token": "NextToken",
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      "limit_key": "MaxResults",
      "result_key": "IdentityProviderSummaries"
    },
    "ListInstances": {
      "input_token": "NextToken",
      "output_token": "NextToken",
      "limit_key": "MaxResults",
      "result_key": "InstanceSummaries"
    },
    "ListProductSubscriptions": {
      "input_token": "NextToken",
      "output_token": "NextToken",
      "limit_key": "MaxResults",
      "result_key": "ProductUserSummaries"
    },
    "ListUserAssociations": {

```

```
"input_token": "NextToken",
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"limit_key": "MaxResults",
"result_key": "InstanceUserSummaries"
}
}
}
```

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{
"version": "2.0",
"metadata": {
"apiVersion": "2018-05-10",
"endpointPrefix": "license-manager-user-subscriptions",
"jsonVersion": "1.1",
"protocol": "rest-json",
"serviceFullName": "AWS License Manager User Subscriptions",
"serviceId": "License Manager User Subscriptions",
"signatureVersion": "v4",
"signingName": "license-manager-user-subscriptions",
"uid": "license-manager-user-subscriptions-2018-05-10"
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      "responseCode":200
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    "output":{"shape":"AssociateUserResponse"},
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      {"shape":"ConflictException"},
      {"shape":"ValidationException"},
      {"shape":"ThrottlingException"},
      {"shape":"InternalServerError"},
      {"shape":"ResourceNotFoundException"},
      {"shape":"AccessDeniedException"}
    ],
    "idempotent":true
  },
  "DeregisterIdentityProvider":{
    "name":"DeregisterIdentityProvider",
    "http":{
      "method":"POST",
      "requestUri":"/identity-provider/DeregisterIdentityProvider",
      "responseCode":200
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    "input":{"shape":"DeregisterIdentityProviderRequest"},
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      "responseCode":200
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  },

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"input":{"shape":"DisassociateUserRequest"},
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  {"shape":"ValidationException"},
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]
},
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"errors":[
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  {"shape":"ConflictException"},
  {"shape":"ValidationException"},
  {"shape":"ThrottlingException"},
  {"shape":"InternalServerError"},
  {"shape":"ResourceNotFoundException"},

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```

    {"shape":"AccessDeniedException"}
  ]
},
"ListProductSubscriptions":{
  "name":"ListProductSubscriptions",
  "http":{
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  "input":{"shape":"ListProductSubscriptionsRequest"},
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    "responseCode":200
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    {"shape":"ValidationException"},
    {"shape":"ThrottlingException"},
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    {"shape":"AccessDeniedException"}
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"RegisterIdentityProvider":{
  "name":"RegisterIdentityProvider",
  "http":{
    "method":"POST",
    "requestUri":"/identity-provider/RegisterIdentityProvider",
    "responseCode":200
  },
}

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```

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  {"shape":"ConflictException"},
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},
"input":{"shape":"StopProductSubscriptionRequest"},
"output":{"shape":"StopProductSubscriptionResponse"},
"errors":[
  {"shape":"ServiceQuotaExceededException"},
  {"shape":"ConflictException"},
  {"shape":"ValidationException"},
  {"shape":"ThrottlingException"},
  {"shape":"InternalServerError"},

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```

    {"shape":"ResourceNotFoundException"},

    {"shape":"AccessDeniedException"}
  ]
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"UpdateIdentityProviderSettings":{
  "name":"UpdateIdentityProviderSettings",
  "http":{
    "method":"POST",
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  },
  "input":{"shape":"UpdateIdentityProviderSettingsRequest"},
  "output":{"shape":"UpdateIdentityProviderSettingsResponse"},
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  "idempotent":true
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"shapes":{
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    "type":"structure",
    "members":{
      "message":{"shape":"String"}
    },
    "exception":true
  },
  "ActiveDirectoryIdentityProvider":{
    "type":"structure",
    "members":{
      "DirectoryId":{"shape":"String"}
    }
  },
  "AssociateUserRequest":{
    "type":"structure",
    "required":[
      "IdentityProvider",
      "InstanceId",
      "Username"
    ],
    "members":{
      "Domain":{"shape":"String"},
      "IdentityProvider":{"shape":"IdentityProvider"},
      "InstanceId":{"shape":"String"},

```

```

    "Username":{"shape":"String"}
  }
},
"AssociateUserResponse":{
  "type":"structure",
  "required":["InstanceUserSummary"],
  "members":{
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  }
},
"BoxInteger":{
  "type":"integer",
  "box":true
},
"ConflictException":{
  "type":"structure",
  "members":{
    "message":{"shape":"String"}
  },
  "exception":true,
  "fault":true
},
"DeregisterIdentityProviderRequest":{
  "type":"structure",
  "required":[
    "IdentityProvider",
    "Product"
  ],
  "members":{
    "IdentityProvider":{"shape":"IdentityProvider"},
    "Product":{"shape":"String"}
  }
},
"DeregisterIdentityProviderResponse":{
  "type":"structure",
  "required":["IdentityProviderSummary"],
  "members":{
    "IdentityProviderSummary":{"shape":"IdentityProviderSummary"}
  }
},
"DisassociateUserRequest":{
  "type":"structure",
  "required":[
    "IdentityProvider",
    "InstanceId",
    "Username"
  ],
  "members":{

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    "Domain":{"shape":"String"},
    "IdentityProvider":{"shape":"IdentityProvider"},
    "InstanceId":{"shape":"String"},
    "Username":{"shape":"String"}
  }
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"DisassociateUserResponse":{
  "type":"structure",
  "required":["InstanceUserSummary"],
  "members":{
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  }
},
"Filter":{
  "type":"structure",
  "members":{
    "Attribute":{"shape":"String"},
    "Operation":{"shape":"String"},
    "Value":{"shape":"String"}
  }
},
"FilterList":{
  "type":"list",
  "member":{"shape":"Filter"}
},
"IdentityProvider":{
  "type":"structure",
  "members":{
    "ActiveDirectoryIdentityProvider":{"shape":"ActiveDirectoryIdentityProvider"}
  },
  "union":true
},
"IdentityProviderSummary":{
  "type":"structure",
  "required":[
    "IdentityProvider",
    "Product",
    "Settings",
    "Status"
  ],
  "members":{
    "FailureMessage":{"shape":"String"},
    "IdentityProvider":{"shape":"IdentityProvider"},
    "Product":{"shape":"String"},
    "Settings":{"shape":"Settings"},
    "Status":{"shape":"String"}
  }
},

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```

"IdentityProviderSummaryList":{
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  "member":{"shape":"IdentityProviderSummary"}
},
"InstanceSummary":{
  "type":"structure",
  "required":[
    "InstanceId",
    "Products",
    "Status"
  ],
  "members":{
    "InstanceId":{"shape":"String"},
    "LastStatusCheckDate":{"shape":"String"},
    "Products":{"shape":"StringList"},
    "Status":{"shape":"String"},
    "StatusMessage":{"shape":"String"}
  }
},
"InstanceSummaryList":{
  "type":"list",
  "member":{"shape":"InstanceSummary"}
},
"InstanceUserSummary":{
  "type":"structure",
  "required":[
    "IdentityProvider",
    "InstanceId",
    "Status",
    "Username"
  ],
  "members":{
    "AssociationDate":{"shape":"String"},
    "DisassociationDate":{"shape":"String"},
    "Domain":{"shape":"String"},
    "IdentityProvider":{"shape":"IdentityProvider"},
    "InstanceId":{"shape":"String"},
    "Status":{"shape":"String"},
    "StatusMessage":{"shape":"String"},
    "Username":{"shape":"String"}
  }
},
"InstanceUserSummaryList":{
  "type":"list",
  "member":{"shape":"InstanceUserSummary"}
},
"InternalServerError":{
  "type":"structure",

```

```

"members":{

"message":{"shape":"String"}
},
"exception":true,
"fault":true
},
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"members":{
"MaxResults":{"shape":"BoxInteger"},
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}
},
>ListIdentityProvidersResponse":{
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"required":["IdentityProviderSummaries"],
"members":{
"IdentityProviderSummaries":{"shape":"IdentityProviderSummaryList"},
"NextToken":{"shape":"String"}
}
},
>ListInstancesRequest":{
"type":"structure",
"members":{
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"MaxResults":{"shape":"BoxInteger"},
"NextToken":{"shape":"String"}
}
},
>ListInstancesResponse":{
"type":"structure",
"members":{
"InstanceSummaries":{"shape":"InstanceSummaryList"},
"NextToken":{"shape":"String"}
}
},
>ListProductSubscriptionsRequest":{
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"required":[
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"Product"
],
"members":{
"Filters":{"shape":"FilterList"},
"IdentityProvider":{"shape":"IdentityProvider"},
"MaxResults":{"shape":"BoxInteger"},
"NextToken":{"shape":"String"},

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```

    "Product":{"shape":"String"}
  }
},
>ListProductSubscriptionsResponse":{"
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    "NextToken":{"shape":"String"},
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  }
},
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    "InstanceId"
  ],
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    "IdentityProvider":{"shape":"IdentityProvider"},
    "InstanceId":{"shape":"String"},
    "MaxResults":{"shape":"BoxInteger"},
    "NextToken":{"shape":"String"}
  }
},
>ListUserAssociationsResponse":{"
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  "members":{"
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    "NextToken":{"shape":"String"}
  }
},
>ProductUserSummary":{"
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  "required":[
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    "Product",
    "Status",
    "Username"
  ],
  "members":{"
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    "IdentityProvider":{"shape":"IdentityProvider"},
    "Product":{"shape":"String"},
    "Status":{"shape":"String"},
    "StatusMessage":{"shape":"String"},
    "SubscriptionEndDate":{"shape":"String"},
    "SubscriptionStartDate":{"shape":"String"},

```

```

    "Username":{"shape":"String"}
  }
},
"ProductUserSummaryList":{
  "type":"list",
  "member":{"shape":"ProductUserSummary"}
},
"RegisterIdentityProviderRequest":{
  "type":"structure",
  "required":[
    "IdentityProvider",
    "Product"
  ],
  "members":{
    "IdentityProvider":{"shape":"IdentityProvider"},
    "Product":{"shape":"String"},
    "Settings":{"shape":"Settings"}
  }
},
"RegisterIdentityProviderResponse":{
  "type":"structure",
  "required":["IdentityProviderSummary"],
  "members":{
    "IdentityProviderSummary":{"shape":"IdentityProviderSummary"}
  }
},
"ResourceNotFoundException":{
  "type":"structure",
  "members":{
    "message":{"shape":"String"}
  },
  "error":{
    "statusCode":404,
    "senderFault":true
  },
  "exception":true
},
"SecurityGroup":{
  "type":"string",
  "max":200,
  "min":5,
  "pattern":"^sg-([0-9a-z]{8})|([0-9a-z]{17})$"
},
"ServiceQuotaExceededException":{
  "type":"structure",
  "members":{
    "message":{"shape":"String"}
  }
},

```



```

"exception":true
},
"Settings":{
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  "required":[
    "SecurityGroupId",
    "Subnets"
  ],
  "members":{
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    "Subnets":{"shape":"SettingsSubnetsList"}
  }
},
"SettingsSubnetsList":{
  "type":"list",
  "member":{"shape":"Subnet"},
  "min":1
},
"StartProductSubscriptionRequest":{
  "type":"structure",
  "required":[
    "IdentityProvider",
    "Product",
    "Username"
  ],
  "members":{
    "Domain":{"shape":"String"},
    "IdentityProvider":{"shape":"IdentityProvider"},
    "Product":{"shape":"String"},
    "Username":{"shape":"String"}
  }
},
"StartProductSubscriptionResponse":{
  "type":"structure",
  "required":["ProductUserSummary"],
  "members":{
    "ProductUserSummary":{"shape":"ProductUserSummary"}
  }
},
"StopProductSubscriptionRequest":{
  "type":"structure",
  "required":[
    "IdentityProvider",
    "Product",
    "Username"
  ],
  "members":{
    "Domain":{"shape":"String"},

```

```

    "IdentityProvider":{"shape":"IdentityProvider"},
    "Product":{"shape":"String"},
    "Username":{"shape":"String"}
  }
},
"StopProductSubscriptionResponse":{"
  "type":"structure",
  "required":["ProductUserSummary"],
  "members":{"
    "ProductUserSummary":{"shape":"ProductUserSummary"}
  }
},
"String":{"type":"string"},
"StringList":{"
  "type":"list",
  "member":{"shape":"String"}
},
"Subnet":{"
  "type":"string",
  "pattern":"subnet-[a-z0-9]{8,17}"
},
"Subnets":{"
  "type":"list",
  "member":{"shape":"Subnet"}
},
"ThrottlingException":{"
  "type":"structure",
  "members":{"
    "message":{"shape":"String"}
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},
"exception":true
},
"UpdateIdentityProviderSettingsRequest":{"
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    "Product",
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  "members":{"
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    "Product":{"shape":"String"},
    "UpdateSettings":{"shape":"UpdateSettings"}
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"UpdateIdentityProviderSettingsResponse":{"
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```

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"members":{
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}
},
"UpdateSettings":{
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  "required":[
    "AddSubnets",
    "RemoveSubnets"
  ],
  "members":{
    "AddSubnets":{"shape":"Subnets"},
    "RemoveSubnets":{"shape":"Subnets"},
    "SecurityGroupId":{"shape":"SecurityGroup"}
  }
},
"ValidationException":{
  "type":"structure",
  "members":{
    "message":{"shape":"String"}
  },
  "exception":true
}
}
}

```

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```
{  
  "version": "2.0",  
  "metadata": {
```

```

"apiVersion":"2018-05-10",
"endpointPrefix":"license-manager-linux-subscriptions",
"jsonVersion":"1.1",
"protocol":"rest-json",
"protocols":["rest-json"],
"serviceFullName":"AWS License Manager Linux Subscriptions",
"serviceId":"License Manager Linux Subscriptions",
"signatureVersion":"v4",
"signingName":"license-manager-linux-subscriptions",
"uid":"license-manager-linux-subscriptions-2018-05-10",
"auth":["aws.auth#sigv4"]
},
"operations":{
  "DeregisterSubscriptionProvider":{
    "name":"DeregisterSubscriptionProvider",
    "http":{
      "method":"POST",
      "requestUri":"/subscription/DeregisterSubscriptionProvider",
      "responseCode":200
    },
    "input":{"shape":"DeregisterSubscriptionProviderRequest"},
    "output":{"shape":"DeregisterSubscriptionProviderResponse"},
    "errors":[
      {"shape":"InternalServerError"},
      {"shape":"ResourceNotFoundException"},
      {"shape":"ThrottlingException"},
      {"shape":"ValidationException"}
    ],
    "idempotent":true
  },
  "GetRegisteredSubscriptionProvider":{
    "name":"GetRegisteredSubscriptionProvider",
    "http":{
      "method":"POST",
      "requestUri":"/subscription/GetRegisteredSubscriptionProvider",
      "responseCode":200
    },
    "input":{"shape":"GetRegisteredSubscriptionProviderRequest"},
    "output":{"shape":"GetRegisteredSubscriptionProviderResponse"},
    "errors":[
      {"shape":"InternalServerError"},
      {"shape":"ResourceNotFoundException"},
      {"shape":"ThrottlingException"},
      {"shape":"ValidationException"}
    ],
    "idempotent":true
  },
  "GetServiceSettings":{

```



```

"name":"GetServiceSettings",
"http":{
  "method":"POST",
  "requestUri":"/subscription/GetServiceSettings",
  "responseCode":200
},
"input":{"shape":"GetServiceSettingsRequest"},
"output":{"shape":"GetServiceSettingsResponse"},
"errors":[
  {"shape":"InternalServerError"},
  {"shape":"ThrottlingException"},
  {"shape":"ValidationException"}
],
"idempotent":true
},
>ListLinuxSubscriptionInstances":{
  "name":"ListLinuxSubscriptionInstances",
  "http":{
    "method":"POST",
    "requestUri":"/subscription/ListLinuxSubscriptionInstances",
    "responseCode":200
  },
  "input":{"shape":"ListLinuxSubscriptionInstancesRequest"},
  "output":{"shape":"ListLinuxSubscriptionInstancesResponse"},
  "errors":[
    {"shape":"InternalServerError"},
    {"shape":"ThrottlingException"},
    {"shape":"ValidationException"}
  ],
  "idempotent":true
},
>ListLinuxSubscriptions":{
  "name":"ListLinuxSubscriptions",
  "http":{
    "method":"POST",
    "requestUri":"/subscription/ListLinuxSubscriptions",
    "responseCode":200
  },
  "input":{"shape":"ListLinuxSubscriptionsRequest"},
  "output":{"shape":"ListLinuxSubscriptionsResponse"},
  "errors":[
    {"shape":"InternalServerError"},
    {"shape":"ThrottlingException"},
    {"shape":"ValidationException"}
  ],
  "idempotent":true
},
>ListRegisteredSubscriptionProviders":{

```

```

"name":"ListRegisteredSubscriptionProviders",
"http":{"
  "method":"POST",
  "requestUri":"/subscription/ListRegisteredSubscriptionProviders",
  "responseCode":200
},
"input":{"shape":"ListRegisteredSubscriptionProvidersRequest"},
"output":{"shape":"ListRegisteredSubscriptionProvidersResponse"},
"errors":[
  {"shape":"InternalServerError"},
  {"shape":"ThrottlingException"},
  {"shape":"ValidationException"}
],
"idempotent":true
},
"ListTagsForResource":{"
  "name":"ListTagsForResource",
  "http":{"
    "method":"GET",
    "requestUri":"/tags/{resourceArn}",
    "responseCode":200
  },
  "input":{"shape":"ListTagsForResourceRequest"},
  "output":{"shape":"ListTagsForResourceResponse"},
  "errors":[
    {"shape":"InternalServerError"},
    {"shape":"ResourceNotFoundException"},
    {"shape":"ValidationException"}
  ]
},
"RegisterSubscriptionProvider":{"
  "name":"RegisterSubscriptionProvider",
  "http":{"
    "method":"POST",
    "requestUri":"/subscription/RegisterSubscriptionProvider",
    "responseCode":200
  },
  "input":{"shape":"RegisterSubscriptionProviderRequest"},
  "output":{"shape":"RegisterSubscriptionProviderResponse"},
  "errors":[
    {"shape":"InternalServerError"},
    {"shape":"ThrottlingException"},
    {"shape":"ValidationException"}
  ],
  "idempotent":true
},
"TagResource":{"
  "name":"TagResource",

```

```

"http":{
  "method":"PUT",
  "requestUri":"/tags/{resourceArn}",
  "responseCode":200
},

"input":{"shape":"TagResourceRequest"},
"output":{"shape":"TagResourceResponse"},
"errors":[
  {"shape":"InternalServerError"},
  {"shape":"ResourceNotFoundException"},
  {"shape":"ValidationException"}
],
"idempotent":true
},
"UntagResource":{
  "name":"UntagResource",
  "http":{
    "method":"DELETE",
    "requestUri":"/tags/{resourceArn}",
    "responseCode":200
  },
  "input":{"shape":"UntagResourceRequest"},
  "output":{"shape":"UntagResourceResponse"},
  "errors":[
    {"shape":"InternalServerError"},
    {"shape":"ResourceNotFoundException"}
  ],
  "idempotent":true
},
"UpdateServiceSettings":{
  "name":"UpdateServiceSettings",
  "http":{
    "method":"POST",
    "requestUri":"/subscription/UpdateServiceSettings",
    "responseCode":200
  },
  "input":{"shape":"UpdateServiceSettingsRequest"},
  "output":{"shape":"UpdateServiceSettingsResponse"},
  "errors":[
    {"shape":"InternalServerError"},
    {"shape":"ThrottlingException"},
    {"shape":"ValidationException"}
  ],
  "idempotent":true
}
},
"shapes":{

```

```

"Boolean":{
  "type":"boolean",
  "box":true
},
"BoxInteger":{
  "type":"integer",
  "box":true
},
"BoxLong":{
  "type":"long",
  "box":true
},
"DeregisterSubscriptionProviderRequest":{
  "type":"structure",
  "required":["SubscriptionProviderArn"],
  "members":{
    "SubscriptionProviderArn":{"shape":"SubscriptionProviderArn"}
  }
},
"DeregisterSubscriptionProviderResponse":{
  "type":"structure",
  "members":{
  }
},
"Filter":{
  "type":"structure",
  "members":{
    "Name":{"shape":"String"},
    "Operator":{"shape":"Operator"},
    "Values":{"shape":"StringList"}
  }
},
"FilterList":{
  "type":"list",
  "member":{"shape":"Filter"}
},
"GetRegisteredSubscriptionProviderRequest":{
  "type":"structure",
  "required":["SubscriptionProviderArn"],
  "members":{
    "SubscriptionProviderArn":{"shape":"SubscriptionProviderArn"}
  }
},
"GetRegisteredSubscriptionProviderResponse":{
  "type":"structure",
  "members":{
    "LastSuccessfulDataRetrievalTime":{"shape":"String"},
    "SecretArn":{"shape":"SecretArn"},

```

```

    "SubscriptionProviderArn":{"shape":"SubscriptionProviderArn"},
    "SubscriptionProviderSource":{"shape":"SubscriptionProviderSource"},
    "SubscriptionProviderStatus":{"shape":"SubscriptionProviderStatus"},
    "SubscriptionProviderStatusMessage":{"shape":"String"}
  }
},
"GetServiceSettingsRequest":{"
  "type":"structure",
  "members":{"
  }
},
"GetServiceSettingsResponse":{"
  "type":"structure",
  "members":{"
    "HomeRegions":{"shape":"StringList"},
    "LinuxSubscriptionsDiscovery":{"shape":"LinuxSubscriptionsDiscovery"},
    "LinuxSubscriptionsDiscoverySettings":{"shape":"LinuxSubscriptionsDiscoverySettings"},
    "Status":{"shape":"Status"},
    "StatusMessage":{"shape":"StringMap"}
  }
},
"Instance":{"
  "type":"structure",
  "members":{"
    "AccountID":{"shape":"String"},
    "AmiId":{"shape":"String"},
    "DualSubscription":{"shape":"String"},
    "InstanceID":{"shape":"String"},
    "InstanceType":{"shape":"String"},
    "LastUpdatedTime":{"shape":"String"},
    "OsVersion":{"shape":"String"},
    "ProductCode":{"shape":"ProductCodeList"},
    "Region":{"shape":"String"},
    "RegisteredWithSubscriptionProvider":{"shape":"String"},
    "Status":{"shape":"String"},
    "SubscriptionName":{"shape":"String"},
    "SubscriptionProviderCreateTime":{"shape":"String"},
    "SubscriptionProviderUpdateTime":{"shape":"String"},
    "UsageOperation":{"shape":"String"}
  }
},
"InstanceList":{"
  "type":"list",
  "member":{"shape":"Instance"}
},
"InternalServerError":{"
  "type":"structure",

```

```

"members":{
  "message":{"shape":"String"}
},
"exception":true,
"fault":true
},
"LinuxSubscriptionsDiscovery":{
  "type":"string",
  "enum":[
    "Enabled",
    "Disabled"
  ]
},
"LinuxSubscriptionsDiscoverySettings":{
  "type":"structure",
  "required":[
    "OrganizationIntegration",
    "SourceRegions"
  ],
  "members":{
    "OrganizationIntegration":{"shape":"OrganizationIntegration"},
    "SourceRegions":{"shape":"StringList"}
  }
},
"ListLinuxSubscriptionInstancesRequest":{
  "type":"structure",
  "members":{
    "Filters":{"shape":"FilterList"},
    "MaxResults":{"shape":"BoxInteger"},
    "NextToken":{"shape":"ListLinuxSubscriptionInstancesRequestNextTokenString"}
  }
},
"ListLinuxSubscriptionInstancesRequestNextTokenString":{
  "type":"string",
  "max":16384,
  "min":1
},
"ListLinuxSubscriptionInstancesResponse":{
  "type":"structure",
  "members":{
    "Instances":{"shape":"InstanceList"},
    "NextToken":{"shape":"String"}
  }
},
"ListLinuxSubscriptionsRequest":{
  "type":"structure",
  "members":{
    "Filters":{"shape":"FilterList"},

```

```

    "MaxResults":{"shape":"BoxInteger"},
    "NextToken":{"shape":"ListLinuxSubscriptionsRequestNextTokenString"}
  }
},
"ListLinuxSubscriptionsRequestNextTokenString":{
  "type":"string",
  "max":16384,
  "min":1
},
"ListLinuxSubscriptionsResponse":{
  "type":"structure",
  "members":{
    "NextToken":{"shape":"String"},
    "Subscriptions":{"shape":"SubscriptionList"}
  }
},
"ListRegisteredSubscriptionProvidersRequest":{
  "type":"structure",
  "members":{
    "MaxResults":{"shape":"ListRegisteredSubscriptionProvidersRequestMaxResultsInteger"},
    "NextToken":{"shape":"String"},
    "SubscriptionProviderSources":{"shape":"SubscriptionProviderSourceList"}
  }
},
"ListRegisteredSubscriptionProvidersRequestMaxResultsInteger":{
  "type":"integer",
  "box":true,
  "max":100,
  "min":1
},
"ListRegisteredSubscriptionProvidersResponse":{
  "type":"structure",
  "members":{
    "NextToken":{"shape":"String"},
    "RegisteredSubscriptionProviders":{"shape":"RegisteredSubscriptionProviderList"}
  }
},
"ListTagsForResourceRequest":{
  "type":"structure",
  "required":["resourceArn"],
  "members":{
    "resourceArn":{
      "shape":"SubscriptionProviderArn",
      "location":"uri",
      "locationName":"resourceArn"
    }
  }
},

```

```

"ListTagsForResourceResponse":{
  "type":"structure",
  "members":{
    "tags":{"shape":"Tags"}
  }
},
"Operator":{
  "type":"string",
  "enum":[
    "Equal",
    "NotEqual",
    "Contains"
  ],
  "max":20,
  "min":1
},
"OrganizationIntegration":{
  "type":"string",
  "enum":[
    "Enabled",
    "Disabled"
  ]
},
"ProductCodeList":{
  "type":"list",
  "member":{"shape":"String"}
},
"RegisterSubscriptionProviderRequest":{
  "type":"structure",
  "required":[
    "SecretArn",
    "SubscriptionProviderSource"
  ],
  "members":{
    "SecretArn":{"shape":"SecretArn"},
    "SubscriptionProviderSource":{"shape":"SubscriptionProviderSource"},
    "Tags":{"shape":"Tags"}
  }
},
"RegisterSubscriptionProviderResponse":{
  "type":"structure",
  "members":{
    "SubscriptionProviderArn":{"shape":"String"},
    "SubscriptionProviderSource":{"shape":"SubscriptionProviderSource"},
    "SubscriptionProviderStatus":{"shape":"SubscriptionProviderStatus"}
  }
},
"RegisteredSubscriptionProvider":{

```



```

"type":"structure",
"members":{
  "LastSuccessfulDataRetrievalTime":{"shape":"String"},
  "SecretArn":{"shape":"SecretArn"},
  "SubscriptionProviderArn":{"shape":"SubscriptionProviderArn"},
  "SubscriptionProviderSource":{"shape":"SubscriptionProviderSource"},
  "SubscriptionProviderStatus":{"shape":"SubscriptionProviderStatus"},
  "SubscriptionProviderStatusMessage":{"shape":"String"}
}
},
"RegisteredSubscriptionProviderList":{
  "type":"list",
  "member":{"shape":"RegisteredSubscriptionProvider"}
},
"ResourceNotFoundException":{
  "type":"structure",
  "members":{
    "message":{"shape":"String"}
  },
  "exception":true
},
"SecretArn":{
  "type":"string",
  "pattern":"^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-\\.]{0,63}:secret:[^]{1,1023}$"
},
>Status":{
  "type":"string",
  "enum":[
    "InProgress",

    "Completed",
    "Successful",
    "Failed"
  ]
},
"String":{"type":"string"},
"StringList":{
  "type":"list",
  "member":{"shape":"StringListMemberString"},
  "max":100,
  "min":1
},
"StringListMemberString":{
  "type":"string",
  "max":100,
  "min":1
},
"StringMap":{

```

```

    "type":"map",
    "key":{"shape":"String"},
    "value":{"shape":"String"}
  },
  "Subscription":{
    "type":"structure",
    "members":{
      "InstanceCount":{"shape":"BoxLong"},
      "Name":{"shape":"String"},
      "Type":{"shape":"String"}
    }
  },
  "SubscriptionList":{
    "type":"list",
    "member":{"shape":"Subscription"}
  },
  "SubscriptionProviderArn":{
    "type":"string",
    "pattern":"^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,510}/[a-z0-9-\\.]{1,510}$"
  },
  "SubscriptionProviderSource":{
    "type":"string",
    "enum":["RedHat"]
  },
  "SubscriptionProviderSourceList":{
    "type":"list",
    "member":{"shape":"SubscriptionProviderSource"}
  },
  "SubscriptionProviderStatus":{
    "type":"string",
    "enum":[
      "ACTIVE",
      "INVALID",
      "PENDING"
    ]
  },
  "TagKeyList":{
    "type":"list",
    "member":{"shape":"String"},
    "max":50,
    "min":0,
    "sensitive":true
  },
  "TagResourceRequest":{
    "type":"structure",
    "required":[
      "resourceArn",

```

```

    "tags"
  ],
  "members":{
    "resourceArn":{
      "shape":"SubscriptionProviderArn",
      "location":"uri",
      "locationName":"resourceArn"
    },
    "tags":{"shape":"Tags"}
  }
},
"TagResourceResponse":{
  "type":"structure",
  "members":{
  }
},
"Tags":{
  "type":"map",
  "key":{"shape":"String"},
  "value":{"shape":"String"},
  "max":50,
  "min":0,
  "sensitive":true
},
"ThrottlingException":{
  "type":"structure",
  "members":{
    "message":{"shape":"String"}
  },
  "exception":true
},
"UntagResourceRequest":{
  "type":"structure",
  "required":[
    "resourceArn",
    "tagKeys"
  ],
  "members":{
    "resourceArn":{
      "shape":"SubscriptionProviderArn",
      "location":"uri",
      "locationName":"resourceArn"
    },
    "tagKeys":{
      "shape":"TagKeyList",
      "location":"querystring",
      "locationName":"tagKeys"
    }
  }
}

```

```

    }
  },
  "UntagResourceResponse":{
    "type":"structure",
    "members":{
    }
  },
  "UpdateServiceSettingsRequest":{
    "type":"structure",
    "required":[
      "LinuxSubscriptionsDiscovery",
      "LinuxSubscriptionsDiscoverySettings"
    ],
    "members":{
      "AllowUpdate":{"shape":"Boolean"},
      "LinuxSubscriptionsDiscovery":{"shape":"LinuxSubscriptionsDiscovery"},
      "LinuxSubscriptionsDiscoverySettings":{"shape":"LinuxSubscriptionsDiscoverySettings"}
    }
  },
  "UpdateServiceSettingsResponse":{
    "type":"structure",
    "members":{
      "HomeRegions":{"shape":"StringList"},
      "LinuxSubscriptionsDiscovery":{"shape":"LinuxSubscriptionsDiscovery"},
      "LinuxSubscriptionsDiscoverySettings":{"shape":"LinuxSubscriptionsDiscoverySettings"},
      "Status":{"shape":"Status"},
      "StatusMessage":{"shape":"StringMap"}
    }
  },
  "ValidationException":{
    "type":"structure",
    "members":{
      "message":{"shape":"String"}
    },
    "exception":true
  }
}
{
  "pagination": {
  }
}
{
  "version": "1.0",
  "parameters": {
    "Region": {
      "builtIn": "AWS::Region",
      "required": false,

```

```

    "documentation": "The AWS region used to dispatch the request.",
    "type": "String"
  },
  "UseDualStack": {
    "builtIn": "AWS::UseDualStack",
    "required": true,
    "default": false,
    "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-
stack, dispatching the request MAY return an error.",
    "type": "Boolean"
  },
  "UseFIPS": {
    "builtIn": "AWS::UseFIPS",
    "required": true,
    "default": false,
    "documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured
endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
    "type": "Boolean"
  },
  "Endpoint": {
    "builtIn": "SDK::Endpoint",
    "required": false,
    "documentation": "Override the endpoint used to send this request",
    "type": "String"
  }
},
"rules": [
  {
    "conditions": [
      {
        "fn": "isSet",
        "argv": [
          {
            "ref": "Endpoint"
          }
        ]
      }
    ]
  }
],
"type": "tree",
"rules": [
  {
    "conditions": [
      {
        "fn": "booleanEquals",
        "argv": [
          {
            "ref": "UseFIPS"
          }
        ]
      }
    ]
  }
]

```

```

        },
        true
    ]
}
],
"error": "Invalid Configuration: FIPS and custom
endpoint are not supported",
"type": "error"
},
{
"conditions": [],
"type": "tree",
"rules": [
{
"conditions": [
{
"fn": "booleanEquals",
"argv": [
{
"ref": "UseDualStack"
},
true
]
}
],
"error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
"type": "error"
},
{
"conditions": [],

"endpoint": {
"url": {
"ref": "Endpoint"
},
"properties": {},
"headers": {}
},
"type": "endpoint"
}
]
}
],
{
"conditions": [],
"type": "tree",
"rules": [

```

```

{
  "conditions": [
    {
      "fn": "isSet",
      "argv": [
        {
          "ref": "Region"
        }
      ]
    }
  ],
  "type": "tree",
  "rules": [
    {
      "conditions": [
        {
          "fn": "aws.partition",
          "argv": [
            {
              "ref": "Region"
            }
          ],
          "assign": "PartitionResult"
        }
      ],
      "type": "tree",
      "rules": [
        {
          "conditions": [
            {
              "fn": "booleanEquals",
              "argv": [
                {
                  "ref": "UseFIPS"
                }
              ],
            }
          ],
          "type": "boolean",
          "value": true
        }
      ]
    }
  ],
  "type": "boolean",
  "value": true
}

```

```

],
"type": "tree",
"rules": [
  {
    "conditions": [
      {
        "fn": "booleanEquals",
        "argv": [
          true,
          {
            "fn": "getAttr",
            "argv": [
              {
                "ref": "PartitionResult"
              },
              "supportsFIPS"
            ]
          }
        ]
      }
    ],
    "fn": "booleanEquals",
    "argv": [
      true,
      {
        "fn": "getAttr",
        "argv": [
          {
            "ref": "PartitionResult"
          },
          "supportsDualStack"
        ]
      }
    ]
  }
],
"type": "tree",
"rules": [
  {
    "conditions": [],
    "type": "tree",
    "rules": [
      {
        "conditions": [],
        "endpoint": {
          "url": "https://license-manager-

```





```

        ]
      }
    ]
  }
],
"type": "tree",
"rules": [
  {
    "conditions": [],
    "type": "tree",
    "rules": [
      {
        "conditions": [],
        "endpoint": {
          "url":
"https://license-manager-fips.{Region}.{PartitionResult#dnsSuffix}",
          "properties": {},
          "headers": {}
        },
        "type": "endpoint"
      }
    ]
  }
],
},
{
  "conditions": [
    {
      "fn": "booleanEquals",
      "argv": [
        {
          "ref": "UseDualStack"
        },
        true
      ]
    }
  ],
  "type": "tree",
  "rules": [
    {

```

```

"conditions": [
  {
    "fn": "booleanEquals",
    "argv":
      [
        true,
        {
          "fn": "getAttr",
          "argv": [
            {
              "ref": "PartitionResult"
            },
            "supportsDualStack"
          ]
        }
      ]
  }
],
"type": "tree",
"rules": [

  {
    "conditions": [],
    "type": "tree",
    "rules": [
      {
        "conditions": [],
        "endpoint": {
          "url": "https://license-
manager.{Region}.{PartitionResult#dualStackDnsSuffix}",
          "properties": {},
          "headers": {}
        },
        "type": "endpoint"
      }
    ]
  }
],
},
{
  "conditions": [],
  "error": "DualStack is enabled but this partition does not support DualStack",
  "type": "error"
}
]
},
{

```

```

        "conditions": [],
        "type": "tree",
        "rules": [
            {
                "conditions": [],
                "endpoint": {
                    "url": "https://license-manager.{Region}.{PartitionResult#dnsSuffix}",
                    "properties": {},
                    "headers": {}
                },
                "type": "endpoint"
            }
        ]
    }
}
]
},
{
    "conditions": [],
    "error": "Invalid Configuration: Missing Region",
    "type": "error"
}
]
}
]
}
{
    "testCases": [
        {
            "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"
                }
            },
            "params": {
                "Region": "us-east-1",
                "UseFIPS": true,
                "UseDualStack": true
            }
        },
        {
            "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-linux-subscriptions-fips.us-east-1.amazonaws.com"
                }
            }
        }
    ]
}

```

```

    },
    "params": {
      "Region": "us-east-1",
      "UseFIPS": true,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region us-east-1 with FIPS disabled and
DualStack enabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-linux-subscriptions.us-east-1.api.aws"
      }
    },
    "params": {
      "Region": "us-east-1",
      "UseFIPS": false,
      "UseDualStack": true
    }
  },
  {
    "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
      }
    },
    "params": {
      "Region": "us-east-1",
      "UseFIPS": false,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-linux-subscriptions-fips.cn-north-1.api.amazonwebservices.com.cn"
      }
    },
    "params": {
      "Region": "cn-north-1",
      "UseFIPS": true,
      "UseDualStack": true
    }
  },
  {

```

```

"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
"expect": {
  "endpoint": {
    "url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"
  }
},
"params": {
  "Region": "cn-north-1",
  "UseFIPS": true,
  "UseDualStack": false
}
},
{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
"expect": {
  "endpoint": {
    "url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
  }
},
"params": {
  "Region": "cn-north-1",
  "UseFIPS": false,
  "UseDualStack": true
}
},
{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
"expect": {
  "endpoint": {
    "url": "https://license-manager-linux-subscriptions.cn-north-1.amazonaws.com.cn"
  }
},
"params": {
  "Region": "cn-north-1",
  "UseFIPS": false,
  "UseDualStack": false
}
},
{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
"expect": {
  "endpoint": {
    "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.api.aws"
  }
},
"params": {
  "Region": "us-gov-east-1",

```

```

    "UseFIPS": true,
    "UseDualStack": true
  }
},
{
  "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.amazonaws.com"
    }
  },
  "params": {
    "Region": "us-gov-east-1",
    "UseFIPS": true,
    "UseDualStack": false
  }
},
{
  "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-linux-subscriptions.us-gov-east-1.api.aws"
    }
  },
  "params": {
    "Region": "us-gov-east-1",
    "UseFIPS": false,
    "UseDualStack": true
  }
},
{
  "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-linux-subscriptions.us-gov-east-1.amazonaws.com"
    }
  },
  "params": {
    "Region": "us-gov-east-1",
    "UseFIPS": false,
    "UseDualStack": false
  }
},
{
  "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
  "expect": {
    "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
  },

```

```

"params": {
  "Region": "us-iso-east-1",
  "UseFIPS": true,
  "UseDualStack": true
}
},
{
  "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
    }
  },
  "params": {
    "Region": "us-iso-east-1",
    "UseFIPS": true,
    "UseDualStack": false
  }
},
{
  "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
  "expect": {
    "error": "DualStack is enabled but this partition does not support DualStack"
  },
  "params": {
    "Region": "us-iso-east-1",
    "UseFIPS": false,
    "UseDualStack": true
  }
},
{
  "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-linux-subscriptions.us-iso-east-1.c2s.ic.gov"
    }
  },
  "params": {
    "Region": "us-iso-east-1",
    "UseFIPS": false,
    "UseDualStack": false
  }
},
{
  "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
  "expect": {
    "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
  },

```



```

"params": {
  "Region": "us-isob-east-1",
  "UseFIPS": true,
  "UseDualStack": true
}
},
{
  "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
    }
  },
  "params": {
    "Region": "us-isob-east-1",
    "UseFIPS": true,
    "UseDualStack": false
  }
},
{
  "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
  "expect": {
    "error": "DualStack is enabled but this partition does not support DualStack"
  },
  "params": {
    "Region": "us-isob-east-1",
    "UseFIPS": false,
    "UseDualStack": true
  }
},
{
  "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-linux-subscriptions.us-isob-east-1.sc2s.sgov.gov"
    }
  },
  "params": {
    "Region": "us-isob-east-1",
    "UseFIPS": false,
    "UseDualStack": false
  }
},
{
  "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
  "expect": {
    "endpoint": {

```

```

        "url": "https://example.com"
    }
},
"params": {
    "Region": "us-east-1",
    "UseFIPS": false,
    "UseDualStack": false,
    "Endpoint": "https://example.com"
}
},
{
    "documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
    "expect": {
        "endpoint": {
            "url": "https://example.com"
        }
    },
    "params": {
        "UseFIPS": false,
        "UseDualStack": false,
        "Endpoint": "https://example.com"
    }
},
{
    "documentation": "For custom endpoint with fips enabled and dualstack disabled",
    "expect":
{
    "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
},
    "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
        "UseDualStack": false,
        "Endpoint": "https://example.com"
    }
},
{
    "documentation": "For custom endpoint with fips disabled and dualstack enabled",
    "expect": {
        "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
    },
    "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": true,
        "Endpoint": "https://example.com"
    }
},

```

```

    {
      "documentation": "Missing region",
      "expect": {
        "error": "Invalid Configuration: Missing Region"
      }
    }
  ],
  "version": "1.0"
}

```

## 1.331 aws-aws-sdk-go-v2-internal-endpoints

### 2.6.15

#### 1.331.1 Available under license :

name: License Scan

on: [pull\_request]

jobs:

licensescan:

name: License Scan

runs-on: ubuntu-latest

strategy:

matrix:

python-version: [3.9]

steps:

- name: Checkout target

uses: actions/checkout@v2

with:

path: sdkbase

ref: \${{ github.base\_ref }}

- name: Checkout this ref

uses: actions/checkout@v2

with:

path: new-ref

fetch-depth: 0

- name: Get Diff

run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT \${{ github.event.pull\_request.base.sha }}  
 \${{ github.sha }} > refDiffFiles.txt

- name: Get Target Files

run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt

- name: Checkout scancode

uses: actions/checkout@v2

with:

repository: nexB/scancode-toolkit

```

    path: scancode-toolkit
    fetch-depth: 1
- name: Set up Python ${{ matrix.python-version }}
  uses: actions/setup-python@v2
  with:
    python-version: ${{ matrix.python-version }}
# ScanCode
- name: Self-configure scancode
  working-directory: ./scancode-toolkit
  run: ./scancode --help
- name: Run Scan code on target
  run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
- name: Run Scan code on pr ref
  run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
# compare
- name: License test
  run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses
are the same. Success."; exit 0; fi
CreateLicense
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
Retry
RetryMetricsHeader
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata

```

```
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
ListReceivedLicenses
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
Retry
RetryMetricsHeader
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.
```

```
package licensemanager
```

```
import (
```

```

"context"
"fmt"
awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
"github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
"github.com/aws/smithy-go/middleware"
smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
//
// If the account that created the license is the same that is performing the
// check out, you must specify the account as the beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
    if params == nil {
        params = &CheckoutLicenseInput{}
    }

    result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
    if err != nil {
        return nil, err
    }

    out := result.(*CheckoutLicenseOutput)
    out.ResultMetadata = metadata
    return out, nil
}

type CheckoutLicenseInput struct {

    //
    Checkout type.
    //
    // This member is required.
    CheckoutType types.CheckoutType

    // Unique, case-sensitive identifier that you provide to ensure the idempotency of
    // the request.
    //
    // This member is required.
    ClientToken *string

    // License entitlements.
    //
    // This member is required.
    Entitlements []types.EntitlementData

```

```

// Key fingerprint identifying the license.
//
// This member is required.
KeyFingerprint *string

// Product SKU.
//
// This member is required.
ProductSKU *string

// License beneficiary.
Beneficiary *string

// Node ID.
NodeId *string

noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

// Checkout type.
CheckoutType types.CheckoutType

// Allowed license entitlements.
EntitlementsAllowed []types.EntitlementData

// Date and time at which the license checkout expires.
Expiration *string

// Date and time at which the license checkout is issued.
IssuedAt *string

// Amazon Resource Name (ARN) of the checkout license.
LicenseArn
*string

// License consumption token.
LicenseConsumptionToken *string

// Node ID.
NodeId *string

// Signed token.
SignedToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

```

```
noSmithyDocumentSerde
```

```
}
```

```
func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
```

```
if err := stack.Serialize.Add(&setOperationInputMiddleware{ }, middleware.After); err != nil {
```

```
return err
```

```
}
```

```
err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{ }, middleware.After)
```

```
if err != nil {
```

```
return err
```

```
}
```

```
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{ }, middleware.After)
```

```
if err != nil {
```

```
return err
```

```
}
```

```
if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
```

```
return fmt.Errorf("add protocol finalizers: %v", err)
```

```
}
```

```
if err = addLegacyEndpointContextSetter(stack, options); err != nil {
```

```
return err
```

```
}
```

```
if err = addSetLoggerMiddleware(stack,
```

```
options); err != nil {
```

```
return err
```

```
}
```

```
if err = addClientRequestID(stack); err != nil {
```

```
return err
```

```
}
```

```
if err = addComputeContentLength(stack); err != nil {
```

```
return err
```

```
}
```

```
if err = addResolveEndpointMiddleware(stack, options); err != nil {
```

```
return err
```

```
}
```

```
if err = addComputePayloadSHA256(stack); err != nil {
```

```
return err
```

```
}
```

```
if err = addRetry(stack, options); err != nil {
```

```
return err
```

```
}
```

```
if err = addRawResponseToMetadata(stack); err != nil {
```

```
return err
```

```
}
```

```
if err = addRecordResponseTiming(stack); err != nil {
```

```
return err
```

```
}
```



```

if err = addClientUserAgent(stack, options); err != nil {
    return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
    return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
    return err
}
if err = addUserAgentRetryMode(stack,
options); err != nil {
    return err
}
if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
    return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
    return err
}
if err = addRecursionDetection(stack); err != nil {
    return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
    return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
    return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
    return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
    return err
}
return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
    return &awsmiddleware.RegisterServiceMetadata{
        Region:    region,

```

```

    ServiceID: ServiceID,
    OperationName: "CheckoutLicense",
  }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
    "context"
    "fmt"
    awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
    "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
    "github.com/aws/smithy-go/middleware"
    smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
    if params == nil {
        params = &CreateLicenseInput{}
    }

    result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
    if err != nil {
        return nil, err
    }

    out := result.(*CreateLicenseOutput)
    out.ResultMetadata = metadata
    return out, nil
}

type CreateLicenseInput struct {

    // License beneficiary.
    //
    // This member is required.
    Beneficiary *string

    // Unique, case-sensitive identifier that you provide to ensure the idempotency of
    // the request.
    //
    //
    // This member is required.
    ClientToken *string

```

```
// Configuration for consumption of the license. Choose a provisional
// configuration for workloads running with continuous connectivity. Choose a
// borrow configuration for workloads with offline usage.
//
// This member is required.
ConsumptionConfiguration *types.ConsumptionConfiguration

// License entitlements.
//
// This member is required.
Entitlements []types.Entitlement

// Home Region for the license.
//
// This member is required.
HomeRegion *string

// License issuer.
//
// This member is required.
Issuer *types.Issuer

// License name.
//
// This member is required.
LicenseName *string

// Product name.
//
// This member is required.
ProductName *string

// Product SKU.
//
// This member is required.
ProductSKU *string

// Date and time range during which the license is valid, in ISO8601-UTC format.
//
// This member is required.
Validity *types.DatetimeRange

// Information about
the license.
LicenseMetadata []types.Metadata

noSmithyDocumentSerde
```

```

}

type CreateLicenseOutput struct {

    // Amazon Resource Name (ARN) of the license.
    LicenseArn *string

    // License status.
    Status types.LicenseStatus

    // License version.
    Version *string

    // Metadata pertaining to the operation's result.
    ResultMetadata middleware.Metadata

    noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
    if err := stack.Serialize.Add(&setOperationInputMiddleware{ }, middleware.After); err != nil {
        return err
    }
    err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{ }, middleware.After)
    if err != nil {
        return err
    }
    err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{ }, middleware.After)
    if err != nil {
        return err
    }
    if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
        return fmt.Errorf("add protocol finalizers: %v", err)
    }

    if
    err = addLegacyEndpointContextSetter(stack, options); err != nil {
        return err
    }
    if err = addSetLoggerMiddleware(stack, options); err != nil {
        return err
    }
    if err = addClientRequestID(stack); err != nil {
        return err
    }
    if err = addComputeContentLength(stack); err != nil {
        return err
    }
}

```

```

if err = addResolveEndpointMiddleware(stack, options); err != nil {
    return err
}
if err = addComputePayloadSHA256(stack); err != nil {
    return err
}
if err = addRetry(stack, options); err != nil {
    return err
}
if err = addRawResponseToMetadata(stack); err != nil {
    return err
}
if err = addRecordResponseTiming(stack); err != nil {
    return err
}
if err = addClientUserAgent(stack, options); err != nil {
    return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
    return
err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
    return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
    return err
}
if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
    return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
    return err
}
if err = addRecursionDetection(stack); err != nil {
    return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
    return err
}
if err = addResponseErrorMiddleware(stack); err != nil {

```

```

    return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
    return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
    return err
}
return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
return &awsmiddleware.RegisterServiceMetadata{
    Region:    region,
    ServiceID: ServiceID,
    OperationName:
    "CreateLicense",
}
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
    "context"
    "fmt"
    awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
    "github.com/aws/aws-sdk-go-v2/service/grafana/types"
    "github.com/aws/smithy-go/middleware"
    smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
    if params == nil {
        params = &DisassociateLicenseInput{}
    }

    result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
    if err != nil {
        return nil, err
    }

    out := result.(*DisassociateLicenseOutput)
    out.ResultMetadata = metadata
    return out, nil
}

```

```

}

type DisassociateLicenseInput struct {

    // The type of license to remove from the workspace.
    //
    // This member is required.
    LicenseType types.LicenseType

    //
    // The ID of the workspace to remove the Grafana Enterprise license from.
    //
    // This member is required.
    WorkspaceId *string

    noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

    // A structure containing information about the workspace.
    //
    // This member is required.
    Workspace *types.WorkspaceDescription

    // Metadata pertaining to the operation's result.
    ResultMetadata middleware.Metadata

    noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
    if err := stack.Serialize.Add(&setOperationInputMiddleware{ }, middleware.After); err != nil {
        return err
    }
    err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{ }, middleware.After)
    if err != nil {
        return err
    }
    err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{ }, middleware.After)
    if err != nil {
        return err
    }
    if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
err != nil {
        return fmt.Errorf("add protocol finalizers: %v", err)
    }
}

```

```

if err = addLegacyEndpointContextSetter(stack, options); err != nil {
    return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
    return err
}
if err = addClientRequestID(stack); err != nil {
    return err
}
if err = addComputeContentLength(stack); err != nil {
    return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
    return err
}
if err = addComputePayloadSHA256(stack); err != nil {
    return err
}
if err = addRetry(stack, options); err != nil {
    return err
}
if err = addRawResponseToMetadata(stack); err != nil {
    return err
}
if err = addRecordResponseTiming(stack); err != nil {
    return err
}
if err = addClientUserAgent(stack, options); err != nil {
    return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil
{
    return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
    return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
    return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
    return err
}
if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {

```



```

    return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
    return err
}
if err = addRecursionDetection(stack); err != nil {
    return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
    return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
    return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
    return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
    return err
}
return nil
}

```

```

func newServiceMetadataMiddleware_opDisassociateLicense(region string)

```

```

*awsmiddleware.RegisterServiceMetadata
{
    return &awsmiddleware.RegisterServiceMetadata{
        Region:    region,
        ServiceID: ServiceID,
        OperationName: "DisassociateLicense",
    }
}

```

```

CheckoutLicense

```

```

Initialize stack step

```

```

RegisterServiceMetadata

```

```

legacyEndpointContextSetter

```

```

SetLogger

```

```

OperationInputValidation

```

```

Serialize stack step

```

```

setOperationInput

```

```

ResolveEndpoint

```

```

OperationSerializer

```

```

Build stack step

```

```

ClientRequestID

```

```

ComputeContentLength

```

```

UserAgent

```

```

AddTimeOffsetMiddleware

```

RecursionDetection  
Finalize stack step  
ResolveAuthScheme  
GetIdentity  
ResolveEndpointV2  
disableHTTPS  
ComputePayloadHash  
Retry  
RetryMetricsHeader  
setLegacyContextSigningOptions  
Signing  
Deserialize stack step  
AddRawResponseToMetadata  
ErrorCloseResponseBody  
CloseResponseBody  
ResponseErrorWrapper  
RequestIDRetriever  
OperationDeserializer  
AddTimeOffsetMiddleware  
RecordResponseTiming  
RequestResponseLogger  
DisassociateLicense  
Initialize stack step  
RegisterServiceMetadata  
legacyEndpointContextSetter  
SetLogger  
OperationInputValidation  
Serialize stack step  
setOperationInput  
ResolveEndpoint  
OperationSerializer  
Build stack step  
ClientRequestID  
ComputeContentLength  
UserAgent  
AddTimeOffsetMiddleware  
RecursionDetection  
Finalize stack step  
ResolveAuthScheme  
GetIdentity  
ResolveEndpointV2  
disableHTTPS  
ComputePayloadHash  
Retry  
RetryMetricsHeader  
setLegacyContextSigningOptions  
Signing  
Deserialize stack step

```
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
CheckoutBorrowLicense
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
Retry
RetryMetricsHeader
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.
```

```
package licensemanager
```

```

import (
    "context"
    "fmt"
    awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
    "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
    "github.com/aws/smithy-go/middleware"
    smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
    if params == nil {
        params = &ListReceivedLicensesInput{}
    }

    result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
    if err != nil {
        return nil, err
    }

    out := result.(*ListReceivedLicensesOutput)
    out.ResultMetadata = metadata
    return out, nil
}

type ListReceivedLicensesInput struct {

    // Filters to scope the results. The following filters are supported:
    //
    // - ProductSKU
    //
    // - Status
    //
    //
    // - Fingerprint
    //
    // - IssuerName
    //
    // - Beneficiary
    Filters []types.Filter

    // Amazon Resource Names (ARNs) of the licenses.
    LicenseArns []string

    // Maximum number of results to return in a single call.

```

```

MaxResults *int32

// Token for the next set of results.
NextToken *string

noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

// Received license details.
Licenses []types.GrantedLicense

// Token for the next set of results.
NextToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
if err := stack.Serialize.Add(&setOperationInputMiddleware{ }, middleware.After); err != nil {
return err
}
err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{ }, middleware.After)
if err != nil {
return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{ },
middleware.After)
if err != nil {
return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addLegacyEndpointContextSetter(stack, options); err != nil {
return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
return err
}
if err = addClientRequestID(stack); err != nil {
return err
}

```

```

}
if err = addComputeContentLength(stack); err != nil {
    return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
    return err
}
if err = addComputePayloadSHA256(stack); err != nil {
    return err
}
if err = addRetry(stack, options); err != nil {
    return err
}
if err = addRawResponseToMetadata(stack); err != nil {
    return err
}
if err = addRecordResponseTiming(stack); err != nil {
    return err
}
if err = addClientUserAgent(stack, options); err != nil {
    return err
}
if err
= smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
    return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
    return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
    return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
    return err
}
if err = addRecursionDetection(stack); err != nil {
    return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
    return err
}
}

```

```

if err = addResponseErrorMiddleware(stack); err != nil {
    return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
    return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
    return err
}
return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region
string) *awsmiddleware.RegisterServiceMetadata {
return &awsmiddleware.RegisterServiceMetadata{
    Region:    region,
    ServiceID: ServiceID,
    OperationName: "ListReceivedLicenses",
}
}
AssociateLicense
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
Retry
RetryMetricsHeader
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata

```

```

ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
    "context"
    "fmt"
    awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
    "github.com/aws/aws-sdk-go-v2/service/grafana/types"
    "github.com/aws/smithy-go/middleware"
    smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. To upgrade, you must use
// ENTERPRISE for the licenseType , and pass in a valid Grafana Labs token for the
// grafanaToken . Upgrading to Grafana Enterprise incurs additional fees. For more
// information, see [Upgrade a workspace to Grafana Enterprise].
//
// [Upgrade a workspace to Grafana Enterprise]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-Grafana-Enterprise.html
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
    if params == nil {
        params = &AssociateLicenseInput{}
    }

    result, metadata, err := c.invokeOperation(ctx,
        "AssociateLicense", params, optFns, c.addOperationAssociateLicenseMiddlewares)
    if err != nil {
        return nil, err
    }

    out := result.(*AssociateLicenseOutput)
    out.ResultMetadata = metadata
    return out, nil
}

type AssociateLicenseInput struct {

// The type of license to associate with the workspace.

```



```

//
// Amazon Managed Grafana workspaces no longer support Grafana Enterprise free
// trials.
//
// This member is required.
LicenseType types.LicenseType

// The ID of the workspace to associate the license with.
//
// This member is required.
WorkspaceId *string

// A token from Grafana Labs that ties your Amazon Web Services account with a
// Grafana Labs account. For more information, see [Link your account with Grafana Labs].
//
// [Link your account with Grafana Labs]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html#AMG-workspace-register-enterprise
GrafanaToken *string

noSmithyDocumentSerde
}

type AssociateLicenseOutput
struct {

// A structure containing data about the workspace.
//
// This member is required.
Workspace *types.WorkspaceDescription

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
if err := stack.Serialize.Add(&setOperationInputMiddleware{ }, middleware.After); err != nil {
return err
}
err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{ }, middleware.After)
if err != nil {
return err
}
err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{ }, middleware.After)
if err != nil {
return err
}
}

```

```

if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
    return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addLegacyEndpointContextSetter(stack, options); err != nil {
    return err
}
if err = addSetLoggerMiddleware(stack,
options); err != nil {
    return err
}
if err = addClientRequestID(stack); err != nil {
    return err
}
if err = addComputeContentLength(stack); err != nil {
    return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
    return err
}
if err = addComputePayloadSHA256(stack); err != nil {
    return err
}
if err = addRetry(stack, options); err != nil {
    return err
}
if err = addRawResponseToMetadata(stack); err != nil {
    return err
}
if err = addRecordResponseTiming(stack); err != nil {
    return err
}
if err = addClientUserAgent(stack, options); err != nil {
    return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
    return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
    return err
}
if err = addUserAgentRetryMode(stack,

```

```

options); err != nil {
    return err
}
if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
    return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
    return err
}
if err = addRecursionDetection(stack); err != nil {
    return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
    return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
    return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
    return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
    return err
}
return nil
}

```

```

func newServiceMetadataMiddleware_opAssociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
return &awsmiddleware.RegisterServiceMetadata{
    Region:    region,
    ServiceID: ServiceID,
    OperationName: "AssociateLicense",
}
}
// Code generated by smithy-go-codegen DO NOT EDIT.

```

```

package licensemanager

```

```

import (
    "context"
    "fmt"
    awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
    "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
    "github.com/aws/smithy-go/middleware"
    smithyhttp "github.com/aws/smithy-go/transport/http"
)

```

```

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
    if params == nil {
        params = &GetLicenseInput{}
    }

    result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
    if err != nil {
        return nil, err
    }

    out := result.(*GetLicenseOutput)
    out.ResultMetadata = metadata
    return out, nil
}

type GetLicenseInput struct {

    // Amazon Resource Name (ARN) of the license.
    //
    // This member is required.
    LicenseArn *string

    // License version.
    Version *string

    noSmithyDocumentSerde
}

type
GetLicenseOutput struct {

    // License details.
    License *types.License

    // Metadata pertaining to the operation's result.
    ResultMetadata middleware.Metadata

    noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
    if err := stack.Serialize.Add(&setOperationInputMiddleware{ }, middleware.After); err != nil {
        return err
    }
}

```

```

err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{ }, middleware.After)
if err != nil {
    return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{ }, middleware.After)
if err != nil {
    return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
    return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addLegacyEndpointContextSetter(stack, options); err != nil {
    return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
    return err
}
if err = addClientRequestID(stack); err
!= nil {
    return err
}
if err = addComputeContentLength(stack); err != nil {
    return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
    return err
}
if err = addComputePayloadSHA256(stack); err != nil {
    return err
}
if err = addRetry(stack, options); err != nil {
    return err
}
if err = addRawResponseToMetadata(stack); err != nil {
    return err
}
if err = addRecordResponseTiming(stack); err != nil {
    return err
}
if err = addClientUserAgent(stack, options); err != nil {
    return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
    return err
}

```

```

}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
    return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
    return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
    return err
}
if err = addOpGetLicenseValidationMiddleware(stack);
err != nil {
    return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
    return err
}
if err = addRecursionDetection(stack); err != nil {
    return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
    return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
    return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
    return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
    return err
}
return nil
}

```

```

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
    return &awsmiddleware.RegisterServiceMetadata{
        Region:    region,
        ServiceID: ServiceID,
        OperationName: "GetLicense",
    }
}

```

```

ListLicenses
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger

```

Serialize stack step  
setOperationInput  
ResolveEndpoint  
OperationSerializer  
Build stack step  
ClientRequestID  
ComputeContentLength  
UserAgent  
AddTimeOffsetMiddleware  
RecursionDetection  
Finalize stack step  
ResolveAuthScheme  
GetIdentity  
ResolveEndpointV2  
disableHTTPS  
ComputePayloadHash  
Retry  
RetryMetricsHeader  
setLegacyContextSigningOptions  
Signing  
Deserialize stack step  
AddRawResponseToMetadata  
ErrorCloseResponseBody  
CloseResponseBody  
ResponseErrorWrapper  
RequestIDRetriever  
OperationDeserializer  
AddTimeOffsetMiddleware  
RecordResponseTiming  
RequestResponseLogger

AWS SDK for Go

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```
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
      "type": "integer"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
      "type": "long"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest"
      },
      "output": {
```





```

    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
  "type": "structure",
  "members": {
    "Name": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The type of name to filter by.</p>"
      }
    },
    "Values": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
      "traits": {
        "smithy.api#documentation": "<p>One or more values for the name to filter by.</p>"
      }
    },
    "Operator": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
      "traits": {
        "smithy.api#documentation": "<p>An operator for filtering results.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>A filter object that is used to return more specific results from a describe operation.\n  Filters can be used to match a set of resources by specific criteria.</p>"
  }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
  "type":
"list",
  "member": {
    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
  }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest"
  },
  "output": {
    "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse"
  },
  "errors": [
    {

```

```

    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerError"
  },
  {
    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
  },
  {
    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
  },
  {
    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
  }
],
"traits": {
  "smithy.api#documentation": "<p>Get details for a Bring Your Own License (BYOL) subscription that's
registered to your account.</p>",
  "smithy.api#http": {
    "code": 200,
    "method": "POST",
    "uri": "/subscription/GetRegisteredSubscriptionProvider"
  },
  "smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest": {
  "type": "structure",
  "members": {
    "SubscriptionProviderArn": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
      "traits": {
        "smithy.api#documentation":
"<p>The Amazon Resource Name (ARN) of the BYOL registration resource to get details for.</p>",
        "smithy.api#required": {}
      }
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse": {
  "type": "structure",
  "members": {
    "SubscriptionProviderArn": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
      "traits": {
        "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for the BYOL registration
resource specified in the request.</p>"
      }
    }
  }
}

```

```

    },
    "SubscriptionProviderSource": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",

      "traits": {
        "smithy.api#documentation": "<p>The subscription provider for the BYOL registration resource
specified \n\t\t\t\t\tin the request.</p>"
      }
    },
    "SecretArn": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
      "traits": {
        "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the third-party access
secret stored in Secrets Manager for the BYOL \n\t\t\t\t\tregistration resource specified in the request.</p>"
      }
    },
    "SubscriptionProviderStatus": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
      "traits": {
        "smithy.api#documentation": "<p>The status of the Linux subscription provider access token from the
last \n\t\t\t\t\tsuccessful subscription data request.</p>"
      }
    },
    "SubscriptionProviderStatusMessage": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The detailed message from your subscription provider token
status.</p>"
      }
    },
    "LastSuccessfulDataRetrievalTime": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The timestamp from the last time License Manager retrieved
subscription details \n\t\t\t\t\tfrom your registered third-party Linux subscription provider.</p>"
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
    "type": "operation",
    "input": {
      "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
    },
  },

```

```

"output": {
  "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
},
"errors": [
  {
    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerError"
  },
  {
    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
  },
  {
    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
  }
],
"traits": {
  "smithy.api#documentation": "<p>Lists the Linux subscriptions service settings for your account.</p>",
  "smithy.api#http": {
    "code": 200,
    "method": "POST",
    "uri": "/subscription/GetServiceSettings"
  },
  "smithy.api#idempotent": {}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest": {
  "type": "structure",
  "members": {}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
  "type": "structure",
  "members": {
    "LinuxSubscriptionsDiscovery": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
      "traits": {
        "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
      }
    },
    "LinuxSubscriptionsDiscoverySettings": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
      "traits": {
        "smithy.api#documentation": "<p>Lists
the settings defined for Linux subscriptions discovery. The settings include ifn Organizations integration has
been enabled, and which Regions data will be aggregated from.</p>"
      }
    }
  },
  "Status": {
    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",

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    "traits": {
      "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being
applied.</p>"
    }
  },
  "StatusMessage": {
    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
    "traits": {
      "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings
current status.</p>"
    }
  },
  "HomeRegions": {
    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
    "traits": {
      "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n  subscriptions.</p>"
    }
  }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
  "type": "structure",
  "members": {
    "AmiId": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The AMI ID used to launch the instance.</p>"
      }
    },
    "InstanceID": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The instance ID of the resource.</p>"
      }
    },
    "InstanceType": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The instance type of the resource.</p>"
      }
    },
    "AccountID": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The account ID which owns the instance.</p>"
      }
    }
  }
}

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    },
    "Status": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The status of the instance.</p>"
      }
    },
    "Region": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The Region the instance is running in.</p>"
      }
    },
    "UsageOperation": {
      "target": "smithy.api#String",

"traits": {
      "smithy.api#documentation": "<p>The usage operation of the instance. For more information, see For
more information, see\n      <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-
subscriptions-usage-operation.html\">Usage\n      operation values</a> in the <i>License Manager User
Guide</i>.</p>"
    }
  },
  "ProductCode": {
    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
    "traits": {
      "smithy.api#documentation": "<p>The product code for the instance. For more information, see <a
href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-
operation.html\">Usage\n      operation values</a> in the <i>License Manager User Guide</i> .</p>"
    }
  },
  "LastUpdatedTime": {
    "target": "smithy.api#String",
    "traits": {
      "smithy.api#documentation": "<p>The time in which the last discovery updated the instance
details.</p>"
    }
  },
  "SubscriptionName": {
    "target": "smithy.api#String",
    "traits": {
      "smithy.api#documentation": "<p>The name of the license subscription that the instance uses.</p>"
    }
  },
  "OsVersion": {
    "target": "smithy.api#String",
    "traits": {
      "smithy.api#documentation": "<p>The operating system software version that runs on your

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instance.</p>
    }
  },
  "SubscriptionProviderCreateTime": {
    "target": "smithy.api#String",
    "traits": {
      "smithy.api#documentation": "<p>The timestamp when you registered
the third-party Linux subscription \n\t\t\tprovider for the subscription that the instance uses.</p>"
    }
  },
  "SubscriptionProviderUpdateTime": {
    "target": "smithy.api#String",
    "traits": {
      "smithy.api#documentation": "<p>The timestamp from the last time that the instance synced with the
registered \n\t\t\tthird-party Linux subscription provider.</p>"
    }
  },
  "DualSubscription": {
    "target": "smithy.api#String",
    "traits": {
      "smithy.api#documentation": "<p>Indicates that you have two different license subscriptions for
\n\t\t\tthe same software on your instance.</p>"
    }
  },
  "RegisteredWithSubscriptionProvider": {
    "target": "smithy.api#String",
    "traits": {
      "smithy.api#documentation": "<p>Indicates that your instance uses a BYOL license subscription from \n\t\t\tta
third-party Linux subscription provider that you've registered with License Manager.</p>"
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Details discovered information about a running instance using Linux
subscriptions.</p>"
  }
},
"com.amazonaws.licenseanagerlinuxsubscriptions#InstanceList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licenseanagerlinuxsubscriptions#Instance"
  }
},
"com.amazonaws.licenseanagerlinuxsubscriptions#InternalServerError": {
  "type": "structure",
  "members": {
    "message": {

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        "target": "smithy.api#String"
    }
},
"traits": {
    "smithy.api#documentation":
"<p>An exception occurred with the service.</p>",
    "smithy.api#error": "server"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
    "type": "service",
    "version": "2018-05-10",
    "operations": [
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
        }
    ],
    "traits": {

```



```

"aws.api#service": {
  "sdkId": "License Manager Linux Subscriptions",
  "arnNamespace": "license-manager-linux-subscriptions",
  "cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
},
"aws.auth#sigv4": {
  "name": "license-manager-linux-subscriptions"
},
"aws.protocols#restJson1": {},
"smithy.api#cors": {
  "additionalAllowedHeaders": [
    "*",
    "content-type",
    "x-amz-content-sha256",
    "x-amz-user-agent",
    "x-amzn-platform-id",
    "x-amzn-trace-id"
  ],
  "additionalExposedHeaders": [
    "x-amzn-errortype",
    "x-amzn-requestid",
    "x-amzn-trace-id"
  ]
},
"smithy.api#documentation": "<p>With License Manager,
you can discover and track your commercial Linux subscriptions on running Amazon EC2 instances.</p>",
"smithy.api#title": "AWS License Manager Linux Subscriptions",
"smithy.rules#endpointRuleSet": {
  "version": "1.0",
  "parameters": {
    "Region": {
      "builtIn": "AWS::Region",
      "required": false,
      "documentation": "The AWS region used to dispatch the request.",
      "type": "String"
    },
    "UseDualStack": {
      "builtIn": "AWS::UseDualStack",
      "required": true,
      "default": false,
      "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not
support dual-stack, dispatching the request MAY return an error.",
      "type": "Boolean"
    },
    "UseFIPS": {
      "builtIn": "AWS::UseFIPS",
      "required": true,
      "default": false,

```

"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",

"type": "Boolean"

},

"Endpoint": {

"builtIn": "SDK::Endpoint",

"required": false,

"documentation": "Override the endpoint used to send this request",

"type": "String"

}

},

"rules": [

{

"conditions": [

{

"fn": "isSet",

"argv": [

{

"ref": "Endpoint"

}

]

}

],

"rules": [

{

"conditions": [

{

"fn": "booleanEquals",

"argv": [

{

"ref": "UseFIPS"

},

true

]

}

],

"error": "Invalid Configuration: FIPS and custom endpoint are not supported",

"type": "error"

},

{

"conditions": [],

"rules": [

{

"conditions": [

{

"fn": "booleanEquals",

"argv": [

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        {
            "ref": "UseDualStack"
        },
        true
    ]
}

],
"error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
"type": "error"
},
{
    "conditions": [],
    "endpoint": {
        "url": {
            "ref": "Endpoint"
        },
        "properties": {},
        "headers": {}
    },
    "type": "endpoint"
}
],
"type": "tree"
}
],
"type": "tree"
},
{
    "conditions": [],
    "rules": [
        {
            "conditions": [
                {
                    "fn": "isSet",
                    "argv": [
                        {
                            "ref": "Region"
                        }
                    ]
                }
            ]
        }
    ],
    "rules": [
        {
            "conditions": [
                {

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```

    "fn": "aws.partition",
      "argv": [
        {
          "ref": "Region"
        }
      ],
      "assign": "PartitionResult"
    }
  ],
  "rules": [
    {
      "conditions": [
        {
          "fn": "booleanEquals",
          "argv": [
            {
              "ref": "UseFIPS"
            },
            true
          ]
        },
        {
          "fn": "booleanEquals",
          "argv": [
            {
              "ref": "UseDualStack"
            },
            true
          ]
        }
      ]
    }
  ],
  "rules": [
    {
      "conditions": [
        {
          "fn": "booleanEquals",
          "argv": [
            true,
            {
              "fn": "getAttr",
              "argv": [
                {
                  "ref": "PartitionResult"
                }
              ]
            }
          ]
        }
      ]
    },
    {
      "fn": "supportsFIPS"
    }
  ]
}

```

```

        ]
      }
    ]
  },
  {
    "fn": "booleanEquals",
    "argv": [
      true,
      {
        "fn": "getAttr",
        "argv": [
          {
            "ref": "PartitionResult"
          },
          "supportsDualStack"
        ]
      }
    ]
  }
],
"rules": [
  {
    "conditions": [],

"rules": [
  {
    "conditions": [],
    "endpoint": {
      "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
      "properties": {},
      "headers": {}
    },
    "type": "endpoint"
  }
],

"type": "tree"
  },
  ],
  "type": "tree"
},
{
  "conditions": [],
  "error": "FIPS and DualStack are enabled, but this partition does not support
one or both",
  "type": "error"

```

```

    }
  ],
  "type": "tree"
},
{
  "conditions": [
    {
      "fn": "booleanEquals",
      "argv": [
        {
          "ref": "UseFIPS"
        },
        true
      ]
    }
  ],
  "rules": [
    {
      "conditions": [
        {
          "fn": "booleanEquals",
          "argv": [
            {
              "fn": "getAttr",
              "argv": [
                {
                  "ref": "PartitionResult"
                },
                "supportsFIPS"
              ]
            },
            true
          ]
        }
      ],
      "rules": [
        {
          "conditions": [],
          "rules": [
            {
              "conditions": [],
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dnsSuffix}"

```

```

"properties": {},
    "headers": {}
  },
  "type": "endpoint"
}
],
"tree": "tree"
}
],
"tree": "tree"
},
{
  "conditions": [],
  "error": "FIPS is enabled
but this partition does not support FIPS",
  "type": "error"
}
],
"tree": "tree"
},
{
  "conditions": [
    {
      "fn": "booleanEquals",
      "argv": [
        {
          "ref": "UseDualStack"
        },
        true
      ]
    }
  ]
}
],
"rules": [
  {
    "conditions": [
      {
        "fn": "booleanEquals",
        "argv": [
          true,
          {
            "fn": "getAttr",
            "argv": [
              {
                "ref": "PartitionResult"
              },
              "supportsDualStack"
            ]
          }
        ]
      }
    ]
  }
]

```

```

        ]
      }
    ]
  }
],
"rules": [
  {
    "conditions": [],
    "rules": [
      {
        "conditions": [],
        "endpoint": {
          "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
          "properties": {},
          "headers": {}
        },
        "type": "endpoint"
      }
    ],
    "type": "tree"
  }
],
"rules": [
  {
    "conditions": [],
    "error": "DualStack is enabled but this partition does not support DualStack",
    "type": "error"
  }
],
"rules": [
  {
    "conditions": [],
    "rules": [
      {
        "conditions": [],
        "endpoint": {
          "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",
          "properties": {},
          "headers": {}
        },
        "type": "endpoint"
      }
    ]
  }
]

```



```

        ],
        "type": "tree"
    }
    ],
    "type": "tree"
}
],
"type": "tree"
},
{
    "conditions": [],
    "error": "Invalid Configuration: Missing Region",
    "type": "error"
}
],
"type": "tree"
}
]
},
"smithy.rules#endpointTests": {
    "testCases": [
        {
            "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"
                }
            }
        },
        {
            "params": {
                "Region": "us-east-1",
                "UseFIPS": true,
                "UseDualStack": true
            }
        },
        {
            "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-linux-subscriptions-fips.us-east-1.amazonaws.com"
                }
            },
            "params": {
                "Region": "us-east-1",
                "UseFIPS": true,
                "UseDualStack": false
            }
        }
    ],
}

```

```

{
  "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-linux-subscriptions.us-east-1.api.aws"
    }
  },
  "params": {
    "Region": "us-east-1",
    "UseFIPS": false,
    "UseDualStack": true
  }
},
{
  "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
    }
  }
},
{
  "params": {
    "Region": "us-east-1",
    "UseFIPS": false,
    "UseDualStack": false
  }
},
{
  "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-linux-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
    }
  },
  "params": {
    "Region": "cn-north-1",
    "UseFIPS": true,
    "UseDualStack": true
  }
},
{
  "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"
    }
  }
}

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```

    }
  },
  "params": {
    "Region": "cn-north-1",
    "UseFIPS": true,
    "UseDualStack": false
  }
},
{
  "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
    }
  },
  "params": {
    "Region": "cn-north-1",
    "UseFIPS": false,
    "UseDualStack": true
  }
},
{
  "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-linux-subscriptions.cn-north-1.amazonaws.com.cn"
    }
  },
  "params": {
    "Region": "cn-north-1",
    "UseFIPS": false,
    "UseDualStack": false
  }
}

```

```

"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.api.aws"
    }
  },
  "params": {
    "Region": "us-gov-east-1",
    "UseFIPS": true,
    "UseDualStack": true
  }
},

```

```

{
  "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.amazonaws.com"
    }
  },
  "params": {
    "Region": "us-gov-east-1",
    "UseFIPS": true,
    "UseDualStack": false
  }
},
{
  "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-linux-subscriptions.us-gov-east-1.api.aws"
    }
  },
  "params": {
    "Region": "us-gov-east-1",
    "UseFIPS": false,
    "UseDualStack": true
  }
},
{
  "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-linux-subscriptions.us-gov-east-1.amazonaws.com"
    }
  },
  "params": {
    "Region": "us-gov-east-1",
    "UseFIPS": false,
    "UseDualStack": false
  }
},
{
  "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
  "expect": {
    "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
  },
  "params": {

```

```

"Region": "us-iso-east-1",
  "UseFIPS": true,
  "UseDualStack": true
}
},
{
  "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
    }
  },
  "params": {
    "Region": "us-iso-east-1",
    "UseFIPS": true,
    "UseDualStack": false
  }
},
{
  "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
enabled",
  "expect": {
    "error": "DualStack is enabled but this partition does not support DualStack"
  },
  "params": {
    "Region": "us-iso-east-1",
    "UseFIPS": false,
    "UseDualStack": true
  }
},
{
  "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-linux-subscriptions.us-iso-east-1.c2s.ic.gov"
    }
  },
  "params": {
    "Region": "us-iso-east-1",
    "UseFIPS":
false,
    "UseDualStack": false
  }
},
{
  "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
  "expect": {
    "error": "FIPS and DualStack are enabled, but this partition does not support one or both"

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```

    },
    "params": {
      "Region": "us-isob-east-1",
      "UseFIPS": true,
      "UseDualStack": true
    }
  },
  {
    "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
      }
    },
    "params": {
      "Region": "us-isob-east-1",
      "UseFIPS": true,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
    "expect": {
      "error": "DualStack is enabled but this partition does not support DualStack"
    },
    "params": {
      "Region": "us-isob-east-1",
      "UseFIPS": false,
      "UseDualStack": true
    }
  },
  {
    "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-linux-subscriptions.us-isob-east-1.sc2s.sgov.gov"
      }
    },
    "params": {
      "Region": "us-isob-east-1",
      "UseFIPS": false,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
    "expect": {

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        "endpoint": {
            "url": "https://example.com"
        }
    },
    "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": false,
        "Endpoint": "https://example.com"
    }
},
{
    "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
    "expect": {
        "endpoint": {
            "url": "https://example.com"
        }
    },
    "params": {
        "UseFIPS": false,
        "UseDualStack": false,
        "Endpoint": "https://example.com"
    }
},
{
    "documentation": "For custom endpoint with fips enabled and dualstack disabled",
    "expect": {
        "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
    },
    "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
        "UseDualStack": false,
        "Endpoint": "https://example.com"
    }
},
{
    "documentation": "For custom endpoint with fips disabled and dualstack enabled",
    "expect": {
        "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
    },
    "params": {
        "Region": "us-east-1",
        "UseFIPS": false,

```

```

        "UseDualStack": true,
        "Endpoint": "https://example.com"
    }
},
{
    "documentation": "Missing region",
    "expect": {
        "error": "Invalid Configuration: Missing Region"
    }
}
],
"version": "1.0"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
    "type": "string",
    "traits": {
        "smithy.api#enum": [
            {
                "name": "Enabled",
                "value": "Enabled",
                "documentation": "Enabled LinuxSubscriptionsDiscovery"
            },
            {
                "name": "Disabled",
                "value": "Disabled",
                "documentation": "Disabled LinuxSubscriptionsDiscovery"
            }
        ]
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings": {
    "type": "structure",
    "members": {
        "SourceRegions": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
            "traits": {
                "smithy.api#documentation": "<p>The Regions in which to discover data for Linux
subscriptions.</p>",
                "smithy.api#required": {}
            }
        },
        "OrganizationIntegration": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
            "traits": {
                "smithy.api#documentation":

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"<p>Details if you have enabled resource discovery across your accounts in Organizations.</p>",
  "smithy.api#required": {}
}
},
"traits": {
  "smithy.api#documentation": "<p>Lists the settings defined for discovering Linux subscriptions.</p>"
}
},
"com.amazonaws.licenseanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licenseanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
  },
  "output": {
    "target": "com.amazonaws.licenseanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licenseanagerlinuxsubscriptions#InternalServerErrorException"
    },
    {
      "target": "com.amazonaws.licenseanagerlinuxsubscriptions#ThrottlingException"
    },
    {
      "target": "com.amazonaws.licenseanagerlinuxsubscriptions#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Lists the running Amazon EC2 instances that were discovered with commercial Linux\n  subscriptions.</p>",
    "smithy.api#http": {
      "code": 200,
      "method": "POST",
      "uri": "/subscription/ListLinuxSubscriptionInstances"
    },
    "smithy.api#idempotent": {},
    "smithy.api#paginated": {
      "inputToken": "NextToken",
      "outputToken": "NextToken",
      "pageSize": "MaxResults",
      "items": "Instances"
    }
  }
},
"com.amazonaws.licenseanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest":

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{
  "type": "structure",
  "members": {
    "Filters": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
      "traits": {
        "smithy.api#documentation": "<p>An array of structures that you can use to filter the results by your
specified criteria. \n \tFor example, you can specify <code>Region</code> in the <code>Name</code>, with the
\n \t<code>contains</code> operator to list all subscriptions that match a partial string in the \n
\n \t<code>Value</code>, such as <code>us-west</code>.</p>\n \t<p>For each filter, you can specify one of the
following values for the <code>Name</code> key \n \tto streamline results:</p>\n \t<ul>\n \t<li>\n
<p>\n \t<code>AccountID</code>\n \t</p>\n \t</li>\n \t<li>\n
<p>\n \t<code>AmiID</code>\n \t</p>\n \t</li>\n \t<li>\n
<p>\n \t<code>DualSubscription</code>\n \t</p>\n \t</li>\n \t<li>\n
<p>\n \t<code>InstanceID</code>\n \t</p>\n \t</li>\n \t<li>\n
<p>\n \t<code>InstanceType</code>\n \t</p>\n \t</li>\n \t<li>\n
<p>\n \t<code>ProductCode</code>\n \t</p>\n \t</li>\n \t<li>\n
<p>\n \t<code>Region</code>\n \t</p>\n \t</li>\n \t<li>\n
<p>\n \t<code>Status</code>\n \t</p>\n \t</li>\n \t<li>\n
<p>\n \t<code>UsageOperation</code>\n \t</p>\n \t</li>\n \t</ul>\n \t<p>For each filter, you can use
one of the following <code>Operator</code>
values to \n \tdefine the behavior of the filter:</p>\n \t<ul>\n \t<li>\n
<p>\n \t<code>contains</code>\n \t</p>\n \t</li>\n \t<li>\n
<p>\n \t<code>equals</code>\n \t</p>\n \t</li>\n \t<li>\n
<p>\n \t<code>NotEqual</code>\n \t</p>\n \t</li>\n \t</ul>"
      }
    },
    "MaxResults": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
      "traits": {
        "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
      }
    },
    "NextToken": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>A token to specify where to
start paginating. This \n\tis the nextToken from a previously truncated response.</p>",
        "smithy.api#length": {
          "min": 1,
          "max": 16384
        }
      }
    }
  },
  "traits": {
    "smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if
parameters in request increases."
  }
}

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    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
    "type": "structure",
    "members": {
      "Instances": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
        "traits": {
          "smithy.api#documentation": "<p>An array that contains instance objects.</p>"
        }
      },
      "NextToken": {
        "target": "smithy.api#String",
        "traits": {
          "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects.</p>"
        }
      }
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerError"
      },
      {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
      },
      {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
      }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Lists the Linux subscriptions that have been discovered. If you have linked your\n\t organization, the returned results will include data aggregated across your accounts in\n\t Organizations.</p>",
      "smithy.api#http": {
        "code": 200,
        "method": "POST",

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    "uri": "/subscription/ListLinuxSubscriptions"
  },
  "smithy.api#idempotent": {},
  "smithy.api#paginated": {
    "inputToken": "NextToken",
    "outputToken": "NextToken",
    "pageSize": "MaxResults",

"items": "Subscriptions"
  }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
  "type": "structure",
  "members": {
    "Filters": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
      "traits": {
        "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those
that match one or\n    more sets of key-value pairs that you specify. For example, you can filter by the name of\n
<code>Subscription</code> with an optional operator to see subscriptions that match,\n    partially match, or don't
match a certain subscription's name.</p>\n    <p>The valid names for this filter are:</p>\n    <ul>\n
<li>\n        <p>\n            <code>Subscription</code>\n        </p>\n    </li>\n    </ul>\n
<p>The
valid Operators for this filter are:</p>\n    <ul>\n    <li>\n        <p>\n            <code>contains</code>\n        </p>\n    </li>\n    <li>\n        <p>\n            <code>equals</code>\n        </p>\n    </li>\n    <li>\n        <p>\n            <code>Notequal</code>\n        </p>\n    </ul>"
      }
    },
    "MaxResults": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
      "traits": {
        "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
      }
    },
    "NextToken": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis
the nextToken from a previously truncated response.</p>",
        "smithy.api#length": {
          "min": 1,
          "max": 16384
        }
      }
    }
  }
},

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    "traits": {
      "smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if
parameters in request increases."
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
    "type": "structure",
    "members": {
      "Subscriptions": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
        "traits": {
          "smithy.api#documentation": "<p>An array that contains subscription objects.</p>"
        }
      },
      "NextToken": {
        "target": "smithy.api#String",
        "traits": {
          "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional objects.</p>"
        }
      }
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders": {
    "type": "operation",
    "input": {
      "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest"
    },
    "output": {
      "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerError"
      },
      {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
      },
      {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
      }
    ],
    "traits": {
      "smithy.api#documentation": "<p>List Bring Your Own License (BYOL) subscription registration

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resources for your account.</p>",
  "smithy.api#http": {
    "code": 200,
    "method": "POST",
    "uri": "/subscription/ListRegisteredSubscriptionProviders"
  },
  "smithy.api#idempotent": {},
  "smithy.api#paginated": {
    "inputToken": "NextToken",
    "outputToken": "NextToken",
    "pageSize": "MaxResults",
    "items": "RegisteredSubscriptionProviders"
  }
}

},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest": {
  "type": "structure",
  "members": {
    "SubscriptionProviderSources": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList",
      "traits": {
        "smithy.api#documentation": "<p>To filter your results, specify which subscription providers to
return \n\t\t\tin the list.</p>"
      }
    },
    "MaxResults": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
      "traits": {
        "smithy.api#documentation": "<p>The maximum items to return in a request.</p>",
        "smithy.api#range": {
          "min": 1,
          "max": 100
        }
      }
    }
  }
},
"NextToken": {
  "target": "smithy.api#String",
  "traits": {
    "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\t\tis the
nextToken from a previously truncated response.</p>"
  }
}
},
"traits": {
  "smithy.api#input": {}
}
}

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```

    "smithy.api#http": {
      "method": "GET",
      "uri": "/tags/{resourceArn}"
    },
    "smithy.api#readonly": {}
  }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest": {
  "type": "structure",
  "members": {
    "resourceArn": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
      "traits": {
        "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource for which to
list metadata tags.</p>",
        "smithy.api#httpLabel": {},
        "smithy.api#required": {}
      }
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse": {
  "type": "structure",
  "members": {
    "tags": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
      "traits": {
        "smithy.api#documentation": "<p>The metadata tags for the requested resource.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
  "type": "string",
  "traits": {
    "smithy.api#enum": [
      {
        "name": "EQUAL",
        "value": "Equal",
        "documentation": "Equal operator"
      },
      {

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        "name": "NOT_EQUAL",
        "value": "NotEqual",
        "documentation": "Not equal operator"
    },
    {
        "name": "CONTAINS",
        "value": "Contains",
        "documentation": "Contains operator"
    }
],
"smithy.api#length": {
    "min": 1,
    "max": 20
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration":
{
    "type": "string",
    "traits": {
        "smithy.api#enum": [
            {
                "name": "Enabled",
                "value": "Enabled",
                "documentation": "Enabled OrganizationIntegration"
            },
            {
                "name": "Disabled",
                "value": "Disabled",
                "documentation": "Disabled OrganizationIntegration"
            }
        ]
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
    "type": "list",
    "member": {
        "target": "smithy.api#String"
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse"
    }
},

```



```

    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse": {
  "type": "structure",
  "members": {
    "SubscriptionProviderSource": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
      "traits": {
        "smithy.api#documentation":
"<p>The Linux subscription provider that you registered.</p>"
      }
    },
    "SubscriptionProviderArn": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Linux subscription
provider resource that you registered.</p>"
      }
    },
    "SubscriptionProviderStatus": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
      "traits": {
        "smithy.api#documentation": "<p>Indicates the status of the registration action for the Linux
subscription provider \n\t\t\t\tthat you requested.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider":
{
  "type": "structure",
  "members": {
    "SubscriptionProviderArn": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
      "traits": {
        "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Linux subscription
provider resource that you registered.</p>"
      }
    },
    "SubscriptionProviderSource": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",

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    "traits": {
      "smithy.api#documentation": "<p>A supported third-party Linux subscription provider. License Manager currently supports \n\t\t\tRed Hat subscriptions.</p>"
    }
  },
  "SecretArn": {
    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
    "traits": {
      "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Secrets Manager secret that stores your registered Linux subscription provider \n\t\t\taccess token. For RHEL account subscriptions, this is the offline token.</p>"
    }
  },
  "SubscriptionProviderStatus": {
    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
    "traits": {
      "smithy.api#documentation": "<p>Indicates the status of your registered Linux subscription provider access token \n\t\t\tfrom the last time License Manager retrieved subscription data. For RHEL account subscriptions, \n\t\t\tthis is the status of the offline token.</p>"
    }
  },
  "SubscriptionProviderStatusMessage": {
    "target": "smithy.api#String",
    "traits": {
      "smithy.api#documentation": "<p>A detailed message that's associated with your BYOL subscription \n\t\t\tprovider token status.</p>"
    }
  },
  "LastSuccessfulDataRetrievalTime": {
    "target": "smithy.api#String",
    "traits": {
      "smithy.api#documentation": "<p>The timestamp from the last time that License Manager accessed third-party subscription data \n\t\t\tfor your account from your registered Linux subscription provider.</p>"
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>A third-party provider for operating system (OS) platform software and license \n\t\t\tsubscriptions, such as Red Hat. When you register a third-party Linux subscription \n\t\t\tprovider, License Manager can get subscription data from the registered provider.</p>"
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList": {
    "type": "list",
    "member": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider"
    }
  }
}

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    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException": {
    "type": "structure",
    "members": {
      "message": {
        "target": "smithy.api#String"
      }
    },
    "traits": {
      "smithy.api#documentation": "<p>Unable to find the requested Amazon Web Services resource.</p>",
      "smithy.api#error": "client"
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn": {
    "type": "string",
    "traits": {
      "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-\\.]{0,63}:secret:[^/]{1,1023}$"
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
    "type": "string",
    "traits": {
      "smithy.api#enum": [
        {
          "name": "InProgress",
          "value": "InProgress",
          "documentation": "InProgress status"
        },
        {
          "name": "Completed",
          "value": "Completed",
          "documentation": "Completed status"
        },
        {
          "name": "Successful",
          "value": "Successful",
          "documentation": "Successful status"
        },
        {
          "name": "Failed",
          "value": "Failed",
          "documentation": "Failed status"
        }
      ]
    }
  }
}

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```

    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
      "type": "list",
      "member": {
        "target": "smithy.api#String",
        "traits": {
          "smithy.api#length": {
            "min": 1,
            "max": 100
          }
        }
      },
      "traits": {
        "smithy.api#length": {
          "min": 1,
          "max": 100
        },
        "smithy.api#uniqueItems": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
      "type": "map",
      "key": {
        "target": "smithy.api#String"
      },
      "value": {
        "target": "smithy.api#String"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
      "type": "structure",
      "members": {
        "Name": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The name of the subscription.</p>"
          }
        },
        "Type": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The type of subscription. The type can be subscription-included with Amazon EC2, Bring Your Own\n    Subscription model (BYOS), or from the Amazon Web Services Marketplace. Certain subscriptions may use licensing from the\n    Amazon Web Services Marketplace as well as OS licensing from Amazon EC2 or BYOS.</p>"
          }
        }
      }
    }
  }

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```

    },
    "InstanceCount": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
      "traits": {
        "smithy.api#documentation": "<p>The total amount of running instances using this
subscription.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>An object which details a discovered Linux subscription.</p>"
  }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
  }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn": {
  "type": "string",
  "traits": {
    "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-
9-\\.]{1,510}/[a-z0-9-\\.]{1,510}$"
  }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource": {
  "type": "string",
  "traits": {
    "smithy.api#enum": [
{
      "name": "RedHat",
      "value": "RedHat",
      "documentation": "RedHat subscription provider namespace"
    }
  ]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource"
  }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus": {
  "type": "string",
  "traits": {

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    "smithy.api#enum": [
      {
        "name": "ACTIVE",
        "value": "ACTIVE",
        "documentation": "ACTIVE status"
      },
      {
        "name": "INVALID",
        "value": "INVALID",
        "documentation": "INVALID status"
      },
      {
        "name": "PENDING",
        "value": "PENDING",
        "documentation": "PENDING status"
      }
    ]
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList": {
    "type": "list",
    "member": {
      "target": "smithy.api#String"
    },
    "traits": {
      "smithy.api#length": {
        "min": 0,
        "max": 50
      },
      "smithy.api#sensitive": {}
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerError"
      },
      {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
      }
    ]
  }
}

```





```

"com.amazonaws.licensemanagerlinuxsubscriptions#Tags": {
  "type": "map",
  "key": {
    "target": "smithy.api#String"
  },
  "value": {
    "target": "smithy.api#String"
  },
  "traits": {
    "smithy.api#length": {
      "min": 0,
      "max": 50
    },
    "smithy.api#sensitive": {}
  }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
  "type": "structure",
  "members": {
    "message": {
      "target": "smithy.api#String"
    }
  },
  "traits": {
    "smithy.api#documentation":
"<p>The request was denied due to request throttling.</p>",
    "smithy.api#error": "client"
  }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerError"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Remove one or more metadata tag from the specified Amazon Web
Services resource.</p>",

```

```

    "smithy.api#http": {
      "method": "DELETE",
      "uri": "/tags/{resourceArn}"
    },
    "smithy.api#idempotent": {}
  }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest": {
  "type": "structure",
  "members": {
    "resourceArn": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
      "traits": {
        "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services resource to remove the metadata tags from.</p>",
        "smithy.api#httpLabel": {},
        "smithy.api#required": {}
      }
    },
    "tagKeys": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList",
      "traits": {
        "smithy.api#documentation": "<p>A list of metadata tag keys to remove from the requested resource.</p>",
        "smithy.api#httpQuery": "tagKeys",
        "smithy.api#required": {}
      }
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse": {
  "type": "structure",
  "members": {},
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"
  }
}

```

```

},
"errors": [
  {
    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerError"
  },
  {
    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
  },
  {
    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
  }
],
"traits": {
  "smithy.api#documentation": "<p>Updates the service settings for Linux subscriptions.</p>",
  "smithy.api#http": {
    "code": 200,
    "method": "POST",
    "uri": "/subscription/UpdateServiceSettings"
  },
  "smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest": {
  "type": "structure",
  "members": {
    "LinuxSubscriptionsDiscovery": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
      "traits": {
        "smithy.api#documentation": "<p>Describes if the discovery of Linux subscriptions is enabled.</p>",
        "smithy.api#required": {}
      }
    },
    "LinuxSubscriptionsDiscoverySettings": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
      "traits": {
        "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The settings include if Organizations\n  integration has been enabled, and which Regions data will be aggregated from.</p>",
        "smithy.api#required": {}
      }
    },
    "AllowUpdate": {
      "target":
"smithy.api#Boolean",
      "traits": {
        "smithy.api#documentation": "<p>Describes if updates are allowed to the service settings for Linux subscriptions. If you\n  allow updates, you can aggregate Linux subscription data in more than one home

```

```

Region.</p>
    }
    }
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
  "type": "structure",
  "members": {
    "LinuxSubscriptionsDiscovery": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
      "traits": {
        "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
      }
    },
    "LinuxSubscriptionsDiscoverySettings": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
      "traits": {
        "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The settings include if Organizations\n    integration has been enabled, and which Regions data will be aggregated from.</p>"
      }
    },
    "Status": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
      "traits": {
        "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being applied.</p>"
      }
    },
    "StatusMessage": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
      "traits": {
        "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings current status.</p>"
      }
    }
  },
  "HomeRegions": {
    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
    "traits": {
      "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated data for Linux\n    subscriptions.</p>"
    }
  }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
  "type": "structure",

```



```

LicenseArn *string

// Current version of the license.
//
// This member is required.
SourceVersion
*string

noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

// Date when the license is deleted.
DeletionDate *string

// License status.
Status types.LicenseDeletionStatus

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
if err := stack.Serialize.Add(&setOperationInputMiddleware{ }, middleware.After); err != nil {
return err
}
err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{ }, middleware.After)
if err != nil {
return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{ }, middleware.After)
if err != nil {
return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addLegacyEndpointContextSetter(stack, options); err !=
nil {
return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
return err
}
}

```

```

if err = addClientRequestID(stack); err != nil {
    return err
}
if err = addComputeContentLength(stack); err != nil {
    return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
    return err
}
if err = addComputePayloadSHA256(stack); err != nil {
    return err
}
if err = addRetry(stack, options); err != nil {
    return err
}
if err = addRawResponseToMetadata(stack); err != nil {
    return err
}
if err = addRecordResponseTiming(stack); err != nil {
    return err
}
if err = addClientUserAgent(stack, options); err != nil {
    return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
    return err
}
if err = addTimeOffsetBuild(stack, c); err != nil
{
    return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
    return err
}
if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
    return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
    return err
}
if err = addRecursionDetection(stack); err != nil {

```



```

return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
return err
}
return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
return &awsmiddleware.RegisterServiceMetadata{
Region:    region,
ServiceID: ServiceID,
OperationName: "DeleteLicense",
}
}
DeleteLicense
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
Retry
RetryMetricsHeader

```

setLegacyContextSigningOptions  
Signing  
Deserialize stack step  
AddRawResponseToMetadata  
ErrorCloseResponseBody  
CloseResponseBody  
ResponseErrorWrapper  
RequestIDRetriever  
OperationDeserializer  
AddTimeOffsetMiddleware  
RecordResponseTiming  
RequestResponseLogger  
GetLicense  
Initialize stack step  
RegisterServiceMetadata  
legacyEndpointContextSetter  
SetLogger  
OperationInputValidation  
Serialize stack step  
setOperationInput  
ResolveEndpoint  
OperationSerializer  
Build stack step  
ClientRequestID  
ComputeContentLength  
UserAgent  
AddTimeOffsetMiddleware  
RecursionDetection  
Finalize stack step  
ResolveAuthScheme  
GetIdentity  
ResolveEndpointV2  
disableHTTPS  
ComputePayloadHash  
Retry  
RetryMetricsHeader  
setLegacyContextSigningOptions  
Signing  
Deserialize stack step  
AddRawResponseToMetadata  
ErrorCloseResponseBody  
CloseResponseBody  
ResponseErrorWrapper  
RequestIDRetriever  
OperationDeserializer  
AddTimeOffsetMiddleware  
RecordResponseTiming  
RequestResponseLogger

```

// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
    "context"
    "fmt"
    awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
    "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
    "github.com/aws/smithy-go/middleware"
    smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
    if params == nil {
        params = &CheckoutBorrowLicenseInput{}
    }

    result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
    if err != nil {
        return nil, err
    }

    out := result.(*CheckoutBorrowLicenseOutput)
    out.ResultMetadata = metadata
    return out, nil
}

type CheckoutBorrowLicenseInput struct {

    // Unique, case-sensitive identifier that you provide to ensure the idempotency of
    //
    // the request.
    //
    // This member is required.
    ClientToken *string

    // Digital signature method. The possible value is JSON Web Signature (JWS)
    // algorithm PS384. For more information, see [RFC 7518 Digital Signature with RSASSA-PSS].
    //
    // [RFC 7518 Digital Signature with RSASSA-PSS]: https://tools.ietf.org/html/rfc7518#section-3.5
    //
    // This member is required.
    DigitalSignatureMethod types.DigitalSignatureMethod

```

```

// License entitlements. Partial checkouts are not supported.
//
// This member is required.
Entitlements []types.EntitlementData

// Amazon Resource Name (ARN) of the license. The license must use the borrow
// consumption configuration.
//
// This member is required.
LicenseArn *string

// Information about constraints.
CheckoutMetadata []types.Metadata

// Node ID.
NodeId *string

noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

// Information about constraints.
CheckoutMetadata []types.Metadata

// Allowed license entitlements.
EntitlementsAllowed
[]types.EntitlementData

// Date and time at which the license checkout expires.
Expiration *string

// Date and time at which the license checkout is issued.
IssuedAt *string

// Amazon Resource Name (ARN) of the license.
LicenseArn *string

// License consumption token.
LicenseConsumptionToken *string

// Node ID.
NodeId *string

// Signed token.
SignedToken *string

// Metadata pertaining to the operation's result.

```

ResultMetadata middleware.Metadata

```
noSmithyDocumentSerde
}
```

```
func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
    if err := stack.Serialize.Add(&setOperationInputMiddleware{ }, middleware.After); err != nil {
        return err
    }
    err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{ }, middleware.After)
    if err != nil {
        return err
    }
    err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{ }, middleware.After)
    if err != nil {
        return
    }
    err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
    return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addLegacyEndpointContextSetter(stack, options); err != nil {
    return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
    return err
}
if err = addClientRequestID(stack); err != nil {
    return err
}
if err = addComputeContentLength(stack); err != nil {
    return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
    return err
}
if err = addComputePayloadSHA256(stack); err != nil {
    return err
}
if err = addRetry(stack, options); err != nil {
    return err
}
if err = addRawResponseToMetadata(stack); err != nil {
    return err
}
if err = addRecordResponseTiming(stack); err != nil {
```

```

return err
}
if err = addClientUserAgent(stack, options); err != nil {
return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
return
err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
return err
}
if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
return err
}
if err = addRecursionDetection(stack); err != nil {
return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
return err
}
return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region

```

```
string) *awsmiddleware.RegisterServiceMetadata {
return &awsmiddleware.RegisterServiceMetadata{
  Region:    region,
  ServiceID: ServiceID,
  OperationName: "CheckoutBorrowLicense",
}
}
```

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```
package licensemanager
```

```
import (
  "context"
  "fmt"
  awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
  "github.com/aws/smithy-go/middleware"
  smithyhttp "github.com/aws/smithy-go/transport/http"
)
```

```
// Checks in the specified license. Check in a license when it is no longer in use.
```

```

func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
    if params == nil {
        params = &CheckInLicenseInput{}
    }

    result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
    if err != nil {
        return nil, err
    }

    out := result.(*CheckInLicenseOutput)
    out.ResultMetadata = metadata
    return out, nil
}

type CheckInLicenseInput struct {

    // License consumption token.
    //
    // This member is required.
    LicenseConsumptionToken *string

    // License beneficiary.
    Beneficiary *string

    noSmithyDocumentSerde
}

type
CheckInLicenseOutput struct {
    // Metadata pertaining to the operation's result.
    ResultMetadata middleware.Metadata

    noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
    if err := stack.Serialize.Add(&setOperationInputMiddleware{ }, middleware.After); err != nil {
        return err
    }
    err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{ }, middleware.After)
    if err != nil {
        return err
    }
    err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{ }, middleware.After)
    if err != nil {

```



```

return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addLegacyEndpointContextSetter(stack, options); err != nil {
return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
return err
}
if err = addClientRequestID(stack); err != nil {
return err
}
if
err = addComputeContentLength(stack); err != nil {
return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
return err
}
if err = addComputePayloadSHA256(stack); err != nil {
return err
}
if err = addRetry(stack, options); err != nil {
return err
}
if err = addRawResponseToMetadata(stack); err != nil {
return err
}
if err = addRecordResponseTiming(stack); err != nil {
return err
}
if err = addClientUserAgent(stack, options); err != nil {
return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
return err
}

```

```

}
if err = addUserAgentRetryMode(stack, options); err != nil {
    return err
}
if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil
{
    return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
    return err
}
if err = addRecursionDetection(stack); err != nil {
    return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
    return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
    return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
    return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
    return err
}
return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
    return &awsmiddleware.RegisterServiceMetadata{
        Region:    region,
        ServiceID: ServiceID,
        OperationName: "CheckInLicense",
    }
}

```

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// Code generated by smithy-go-codegen DO NOT EDIT.

```
package licensemanager
```

```
import (
```

```
    "context"
```

```
    "fmt"
```

```
    awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
```

```
    "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
```

```
    "github.com/aws/smithy-go/middleware"
```

```
    smithyhttp "github.com/aws/smithy-go/transport/http"
```

```
)
```

```
// Lists the licenses for your account.
```

```
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
```

```
(*ListLicensesOutput, error) {
```

```
    if params == nil {
```

```
        params = &ListLicensesInput{}
```

```
    }
```

```
    result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
```

```
    c.addOperationListLicensesMiddlewares)
```

```
    if err != nil {
```

```
        return nil, err
```

```
    }
```

```
    out := result.(*ListLicensesOutput)
```

```
    out.ResultMetadata = metadata
```

```
    return out, nil
```

```
}
```

```
type ListLicensesInput struct {
```

```
    // Filters to scope the results. The following filters are supported:
```

```
    //
```

```
    // - Beneficiary
```

```
    //
```

```
    // - ProductSKU
```

```
    //
```

```
    // - Fingerprint
```

```

//
// - Status
Filters
[]types.Filter

// Amazon Resource Names (ARNs) of the licenses.
LicenseArns []string

// Maximum number of results to return in a single call.
MaxResults *int32

// Token for the next set of results.
NextToken *string

noSmithyDocumentSerde
}

type ListLicensesOutput struct {

// License details.
Licenses []types.License

// Token for the next set of results.
NextToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
if err := stack.Serialize.Add(&setOperationInputMiddleware{ }, middleware.After); err != nil {
return err
}
err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{ }, middleware.After)
if err != nil {
return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{ }, middleware.After)
if err != nil {
return err
}
if err := addProtocolFinalizerMiddlewares(stack,
options, "ListLicenses"); err != nil {
return fmt.Errorf("add protocol finalizers: %v", err)
}
}

```



```

if err = addLegacyEndpointContextSetter(stack, options); err != nil {
    return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
    return err
}
if err = addClientRequestID(stack); err != nil {
    return err
}
if err = addComputeContentLength(stack); err != nil {
    return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
    return err
}
if err = addComputePayloadSHA256(stack); err != nil {
    return err
}
if err = addRetry(stack, options); err != nil {
    return err
}
if err = addRawResponseToMetadata(stack); err != nil {
    return err
}
if err = addRecordResponseTiming(stack); err != nil {
    return err
}
if err = addClientUserAgent(stack, options); err != nil {
    return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack);
err != nil {
    return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
    return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
    return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
    return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {

```

```

return err
}
if err = addRecursionDetection(stack); err != nil {
return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
return err
}
return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
return &awsmiddleware.RegisterServiceMetadata{
Region:    region,
ServiceID:
ServiceID,
OperationName: "ListLicenses",
}
}
CheckInLicense
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
ResolveAuthScheme
GetIdentity
ResolveEndpointV2

```

```

disableHTTPS
ComputePayloadHash
Retry
RetryMetricsHeader
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>You don't have sufficient access to perform this action.</p>",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
      "type": "structure",
      "members": {
        "DirectoryId": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The directory ID for an Active Directory identity provider.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation":
          "<p>Details about an Active Directory identity provider.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUser": {
      "type": "operation",

```

```



```

```

    "target": "smithy.api#String",
    "traits": {
      "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
      "smithy.api#required": {}
    }
  },
  "InstanceId": {
    "target": "smithy.api#String",
    "traits": {
      "smithy.api#documentation": "<p>The ID of the
EC2 instance, which provides user-based subscriptions.</p>",
      "smithy.api#required": {}
    }
  },
  "IdentityProvider": {
    "target": "com.amazonaws.licenseanagerusersubscriptions#IdentityProvider",
    "traits": {
      "smithy.api#documentation": "<p>The identity provider of the user.</p>",
      "smithy.api#required": {}
    }
  },
  "Domain": {
    "target": "smithy.api#String",
    "traits": {
      "smithy.api#documentation": "<p>The domain name of the user.</p>"
    }
  }
},
"com.amazonaws.licenseanagerusersubscriptions#AssociateUserResponse": {
  "type": "structure",
  "members": {
    "InstanceUserSummary": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#InstanceUserSummary",
      "traits": {
        "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
        "smithy.api#required": {}
      }
    }
  }
},
"com.amazonaws.licenseanagerusersubscriptions#BoxInteger": {
  "type": "integer"
},
"com.amazonaws.licenseanagerusersubscriptions#ConflictException": {
  "type": "structure",
  "members": {
    "message": {

```

```

        "target": "smithy.api#String"
    }
},
"traits": {
    "smithy.api#documentation": "<p>The request couldn't be completed because it conflicted with the current
state of the\n    resource.</p>",
    "smithy.api#error": "server"
}
},
"com.amazonaws.licenseanagerusersubscriptions#DeregisterIdentityProvider":
{
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licenseanagerusersubscriptions#DeregisterIdentityProviderRequest"
    },
    "output": {
        "target": "com.amazonaws.licenseanagerusersubscriptions#DeregisterIdentityProviderResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licenseanagerusersubscriptions#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licenseanagerusersubscriptions#ConflictException"
        },
        {
            "target": "com.amazonaws.licenseanagerusersubscriptions#InternalServerError"
        },
        {
            "target": "com.amazonaws.licenseanagerusersubscriptions#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licenseanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
            "target": "com.amazonaws.licenseanagerusersubscriptions#ThrottlingException"
        },
        {
            "target": "com.amazonaws.licenseanagerusersubscriptions#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Deregisters the identity provider from providing user-based
subscriptions.</p>",
        "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/identity-provider/DeregisterIdentityProvider"
        }
    }
}

```

```

    },
    "smithy.api#idempotent": {}
  }
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest": {
  "type": "structure",
  "members": {
    "IdentityProvider": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
      "traits": {
        "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
        "smithy.api#required": {}
      }
    },
    "Product": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
        "smithy.api#required": {}
      }
    }
  }
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
  "type": "structure",
  "members": {
    "IdentityProviderSummary": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
      "traits": {
        "smithy.api#documentation":
"<p>Metadata that describes the results of an identity provider operation.</p>",
        "smithy.api#required": {}
      }
    }
  }
},
"com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
    }
  ],

```

```

    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ConflictException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#InternalServerErrorException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ResourceNotFoundException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ServiceQuotaExceededException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ThrottlingException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Disassociates the user from an EC2 instance providing user-based
subscriptions.</p>",
    "smithy.api#http": {
      "code": 200,
      "method": "POST",
      "uri": "/user/DisassociateUser"
    },
    "smithy.api#idempotent": {}
  }
},
"com.amazonaws.licenseanagerusersubscriptions#DisassociateUserRequest": {
  "type": "structure",
  "members": {
    "Username": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
        "smithy.api#required": {}
      }
    },
    "InstanceId": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
        "smithy.api#required": {}
      }
    }
  }
}

```



```

    },
    "IdentityProvider": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
      "traits": {
        "smithy.api#documentation":
"<p>An object that specifies details for the identity provider.</p>",
        "smithy.api#required": {}
      }
    },
    "Domain": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The domain name of the user.</p>"
      }
    }
  }
},
"com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse": {
  "type": "structure",
  "members": {
    "InstanceUserSummary": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
      "traits": {
        "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
        "smithy.api#required": {}
      }
    }
  }
},
"com.amazonaws.licensemanagerusersubscriptions#Filter": {
  "type": "structure",
  "members": {
    "Attribute": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The name of an attribute to use as a filter.</p>"
      }
    },
    "Operation": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The type of search (For example, eq, geq, leq)</p>"
      }
    },
    "Value": {
      "target": "smithy.api#String",
      "traits": {

```

```

    "smithy.api#documentation": "<p>Value of the filter.</p>"
  }
}
},
"traits": {
  "smithy.api#documentation": "<p>A filter name and value pair that is used
to return more specific results from a describe\n operation. Filters can be used to match a set of resources by
specific criteria, such as tags,\n attributes, or IDs.</p>"
}
},
"com.amazonaws.licenseanagerusersubscriptions#FilterList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licenseanagerusersubscriptions#Filter"
  }
},
"com.amazonaws.licenseanagerusersubscriptions#IdentityProvider": {
  "type": "union",
  "members": {
    "ActiveDirectoryIdentityProvider": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ActiveDirectoryIdentityProvider",
      "traits": {
        "smithy.api#documentation": "<p>An object that details an Active Directory identity provider.</p>"
      }
    }
  }
},
"traits": {
  "smithy.api#documentation":
"<p>Details about an identity provider.</p>"
}
},
"com.amazonaws.licenseanagerusersubscriptions#IdentityProviderSummary": {
  "type": "structure",
  "members": {
    "IdentityProvider": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#IdentityProvider",
      "traits": {
        "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
        "smithy.api#required": {}
      }
    }
  }
},
"Settings": {
  "target": "com.amazonaws.licenseanagerusersubscriptions#Settings",
  "traits": {
    "smithy.api#documentation": "<p>An object that details the registered identity providers product
related configuration\n settings such as the subnets to provision VPC endpoints.</p>",
    "smithy.api#required":

```

```

{}
  }
},
"Product": {
  "target": "smithy.api#String",
  "traits": {
    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
    "smithy.api#required": {}
  }
},
"Status": {
  "target": "smithy.api#String",
  "traits": {
    "smithy.api#documentation": "<p>The status of an identity provider.</p>",
    "smithy.api#required": {}
  }
},
"FailureMessage": {
  "target": "smithy.api#String",
  "traits": {
    "smithy.api#documentation": "<p>The failure message associated with an identity provider.</p>"
  }
},
"traits": {
  "smithy.api#documentation":
"<p>Describes an identity provider.</p>"
}
},
"com.amazonaws.licenseanageruserssubscriptions#IdentityProviderSummaryList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licenseanageruserssubscriptions#IdentityProviderSummary"
  }
},
"com.amazonaws.licenseanageruserssubscriptions#InstanceSummary": {
  "type": "structure",
  "members": {
    "InstanceId": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
        "smithy.api#required": {}
      }
    }
  }
},
"Status": {
  "target": "smithy.api#String",

```

```

    "traits": {
      "smithy.api#documentation": "<p>The status
of an EC2 instance resource.</p>",
      "smithy.api#required": {}
    }
  },
  "Products": {
    "target": "com.amazonaws.licensemanagerusersubscriptions#StringList",
    "traits": {
      "smithy.api#documentation": "<p>A list of provided user-based subscription products.</p>",
      "smithy.api#required": {}
    }
  },
  "LastStatusCheckDate": {
    "target": "smithy.api#String",
    "traits": {
      "smithy.api#documentation": "<p>The date of the last status check.</p>"
    }
  },
  "StatusMessage": {
    "target": "smithy.api#String",
    "traits": {
      "smithy.api#documentation": "<p>The status message for an EC2 instance.</p>"
    }
  }
}
},
"traits": {
  "smithy.api#documentation": "<p>Describes an EC2 instance providing user-based subscriptions.</p>"
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
  }
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {
  "type": "structure",
  "members": {
    "Username": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
        "smithy.api#required": {}
      }
    }
  },
  "InstanceId": {

```

```

    "target": "smithy.api#String",
    "traits":
  {
    "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
    "smithy.api#required": {}
  }
},
"IdentityProvider": {
  "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
  "traits": {
    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
    "smithy.api#required": {}
  }
},
"Status": {
  "target": "smithy.api#String",
  "traits": {
    "smithy.api#documentation": "<p>The status of a user associated with an EC2 instance.</p>",
    "smithy.api#required": {}
  }
},
"StatusMessage": {
  "target": "smithy.api#String",
  "traits": {
    "smithy.api#documentation": "<p>The status message for users of an EC2 instance.</p>"
  }
},
"Domain": {
  "target": "smithy.api#String",
  "traits": {
    "smithy.api#documentation": "<p>The domain name of the user.</p>"
  }
},
"AssociationDate": {
  "target": "smithy.api#String",
  "traits": {
    "smithy.api#documentation": "<p>The date a user was associated with an EC2 instance.</p>"
  }
},
"DisassociationDate": {
  "target": "smithy.api#String",
  "traits": {
    "smithy.api#documentation": "<p>The date a user was disassociated from an EC2 instance.</p>"
  }
}
}

```

```

},
  "traits": {
    "smithy.api#documentation": "<p>Describes users of an EC2 instance providing user-based
subscriptions.</p>"
  }
},
"com.amazonaws.licenseanagerusersubscriptions#InstanceUserSummaryList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licenseanagerusersubscriptions#InstanceUserSummary"
  }
},
"com.amazonaws.licenseanagerusersubscriptions#InternalServerError": {
  "type": "structure",
  "members": {
    "message": {
      "target": "smithy.api#String"
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>An exception occurred with the service.</p>",
    "smithy.api#error": "server"
  }
},
"com.amazonaws.licenseanagerusersubscriptions#LicenseManagerUserSubscriptions": {
  "type": "service",

"version": "2018-05-10",
"operations": [
  {
    "target": "com.amazonaws.licenseanagerusersubscriptions#AssociateUser"
  },
  {
    "target": "com.amazonaws.licenseanagerusersubscriptions#DeregisterIdentityProvider"
  },
  {
    "target": "com.amazonaws.licenseanagerusersubscriptions#DisassociateUser"
  },
  {
    "target": "com.amazonaws.licenseanagerusersubscriptions#ListIdentityProviders"
  },
  {
    "target": "com.amazonaws.licenseanagerusersubscriptions#ListInstances"
  },
  {
    "target": "com.amazonaws.licenseanagerusersubscriptions#ListProductSubscriptions"
  },
  {

```

```

    "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations"
  },
  {
    "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
  },
  {
    "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"
  },
  {
    "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
  },
  {
    "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
  }
],
"traits": {
  "aws.api#service": {
    "sdkId": "License Manager User Subscriptions",
    "arnNamespace": "license-manager-user-subscriptions",
    "cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
  },
  "aws.auth#sigv4": {
    "name": "license-manager-user-subscriptions"
  },
  "aws.protocols#restJson1": {},
  "smithy.api#cors": {
    "additionalAllowedHeaders": [
      "*",
      "content-type",
      "x-amz-content-sha256",
      "x-amz-user-agent",
      "x-amzn-platform-id",
      "x-amzn-trace-id",
      "content-length",
      "x-api-key",
      "authorization",
      "x-amz-date",
      "x-amz-security-token",
      "Access-Control-Allow-Headers",
      "Access-Control-Allow-Methods",
      "Access-Control-Allow-Origin"
    ],
    "additionalExposedHeaders": [
      "x-amzn-errortype",
      "x-amzn-requestid",
      "x-amzn-trace-id"
    ]
  }
}

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]
  },
  "smithy.api#documentation": "<p>With License Manager, you can create user-based subscriptions to
utilize licensed software with a per user subscription fee on Amazon EC2 instances.</p>",
  "smithy.api#title": "AWS License Manager User Subscriptions",
  "smithy.rules#endpointRuleSet": {
    "version": "1.0",
    "parameters": {
      "Region": {
        "builtIn": "AWS::Region",
        "required": false,
        "documentation": "The AWS region used to dispatch the request.",
        "type": "String"
      },
      "UseDualStack": {
        "builtIn": "AWS::UseDualStack",
        "required": true,
        "default": false,
        "documentation": "When true, use the dual-stack
endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
        "type": "Boolean"
      },
      "UseFIPS": {
        "builtIn": "AWS::UseFIPS",
        "required": true,
        "default": false,
        "documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the
configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
        "type": "Boolean"
      },
      "Endpoint": {
        "builtIn": "SDK::Endpoint",
        "required": false,
        "documentation": "Override the endpoint used to send this request",
        "type": "String"
      }
    }
  },
  "rules": [
    {
      "conditions": [
        {
          "fn": "isSet",
          "argv": [
            {
              "ref": "Endpoint"
            }
          ]
        }
      ]
    }
  ]
}

```



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    }
  ],
  "type": "tree",
  "rules": [
    {
      "conditions": [
        {
          "fn": "booleanEquals",
          "argv": [
            {
              "ref": "UseFIPS"
            },
            true
          ]
        }
      ],
      "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
      "type": "error"
    },
    {
      "conditions": [
        {
          "fn": "booleanEquals",
          "argv": [
            {
              "ref": "UseDualStack"
            },
            true
          ]
        }
      ],
      "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
      "type": "error"
    },
    {
      "conditions": [],
      "endpoint": {
        "url": {
          "ref": "Endpoint"
        },
        "properties": {},
        "headers": {}
      },
      "type": "endpoint"
    }
  ]
}

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    },
    {
      "conditions": [
        {
          "fn": "isSet",
          "argv": [
            {
              "ref": "Region"
            }
          ]
        }
      ],
      "type": "tree",
      "rules": [
        {
          "conditions": [
            {
              "fn": "aws.partition",
              "argv": [
                {
                  "ref": "Region"
                }
              ]
            },
            {
              "assign": "PartitionResult"
            }
          ],
          "type": "tree",
        }
      ],
      "rules": [
        {
          "conditions": [
            {
              "fn": "booleanEquals",
              "argv": [
                {
                  "ref": "UseFIPS"
                },
                true
              ]
            }
          ],
        },
        {
          "fn": "booleanEquals",
          "argv": [
            {
              "ref": "UseDualStack"
            }
          ]
        }
      ]
    }
  ]
}

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        },
        true
    ]
}
],
"type": "tree",
"rules": [
    {
        "conditions": [
            {
                "fn": "booleanEquals",
                "argv": [
                    true,
                    {
                        "fn": "getAttr",
"argv": [
                            {
                                "ref": "PartitionResult"
                            },
                            "supportsFIPS"
                        ]
                    }
                ],
            },
            {
                "fn": "booleanEquals",
                "argv": [
                    true,
                    {
                        "fn": "getAttr",
"argv": [
                            {
                                "ref": "PartitionResult"
                            },
                            "supportsDualStack"
                        ]
                    }
                ],
            }
        ],
        "type": "tree",
        "rules": [
            {
                "conditions": [],
                "endpoint": {

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        "url": "https://license-manager-user-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
        "properties": {},
        "headers": {}
    },
    "type": "endpoint"
}
]
},
{
    "conditions": [],
    "error": "FIPS and DualStack are enabled, but this partition does not support one or
both",
    "type": "error"
}
]
},
{
    "conditions": [
        {
            "fn": "booleanEquals",
            "argv": [
                {
                    "ref": "UseFIPS"
                },
                true
            ]
        }
    ],
    "type": "tree",
}
"rules": [
    {
        "conditions": [
            {
                "fn": "booleanEquals",
                "argv": [
                    true,
                    {
                        "fn": "getAttr",
                        "argv": [
                            {
                                "ref": "PartitionResult"
                            },
                            "supportsFIPS"
                        ]
                    }
                ]
            }
        ]
    }
}

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        ]
      }
    ],
    "type": "tree",
    "rules": [
      {
        "conditions": [],
        "endpoint": {
          "url": "https://license-manager-user-subscriptions-
fips.{Region}.{PartitionResult#dnsSuffix}",
          "properties": {},
          "headers": {}
        },
        "type": "endpoint"
      }
    ]
  },
  {
    "conditions": [],
    "error": "FIPS is enabled but this partition does not support FIPS",
    "type": "error"
  }
]
},
{
  "conditions": [
    {
      "fn": "booleanEquals",
      "argv": [
        {
          "ref": "UseDualStack"
        },
        true
      ]
    }
  ],
  "type": "tree",
  "rules": [
    {
      "conditions": [
        {
          "fn": "booleanEquals",
          "argv": [
            true,
            {

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```

        "fn": "getAttr",
        "argv": [
            {
                "ref": "PartitionResult"
            },
            "supportsDualStack"
        ]
    }
]
},
"type": "tree",
"rules": [
    {
        "conditions": [],
        "endpoint": {
            "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
            "properties": {},
            "headers": {}
        },
        "type": "endpoint"
    }
],
{
    "conditions": [],
    "error": "DualStack is enabled but this partition does
not support DualStack",
    "type": "error"
}
],
{
    "conditions": [],
    "endpoint": {
        "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",
        "properties": {},
        "headers": {}
    },
    "type": "endpoint"
}
]
}
]
},

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    {
      "conditions":
    ],
      "error": "Invalid Configuration: Missing Region",
      "type": "error"
    }
  ]
},
"smithy.rules#endpointTests": {
  "testCases": [
    {
      "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
        }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
        "UseDualStack": true
      }
    },
    {
      "documentation":
"\"For region us-east-1 with FIPS enabled and DualStack disabled\",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions-fips.us-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions.us-east-1.api.aws"
        }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": false,

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        "UseDualStack": true
    }
},
{
    "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager-user-subscriptions.us-east-1.amazonaws.com"
        }
    },
    "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": false
    }
},
{
    "documentation": "For region cn-north-1 with
FIPS enabled and DualStack enabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager-user-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
        }
    },
    "params": {
        "Region": "cn-north-1",
        "UseFIPS": true,
        "UseDualStack": true
    }
},
{
    "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager-user-subscriptions-fips.cn-north-1.amazonaws.com.cn"
        }
    },
    "params": {
        "Region": "cn-north-1",
        "UseFIPS": true,
        "UseDualStack": false
    }
},
{
    "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
    "expect": {

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        "endpoint": {
            "url": "https://license-manager-user-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
        }
    },
    "params": {
        "Region": "cn-north-1",
        "UseFIPS": false,
        "UseDualStack": true
    }
},
{
    "documentation": "For region cn-north-1
with FIPS disabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager-user-subscriptions.cn-north-1.amazonaws.com.cn"
        }
    },
    "params": {
        "Region": "cn-north-1",
        "UseFIPS": false,
        "UseDualStack": false
    }
},
{
    "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.api.aws"
        }
    },
    "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": true,
        "UseDualStack": true
    }
},
{
    "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.amazonaws.com"
        }
    },
    "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": true,

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        "UseDualStack": false
    }
},
{
    "documentation": "For region us-gov-east-1
with FIPS disabled and DualStack enabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager-user-subscriptions.us-gov-east-1.api.aws"
        }
    },
    "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": false,
        "UseDualStack": true
    }
},
{
    "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager-user-subscriptions.us-gov-east-1.amazonaws.com"
        }
    },
    "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": false,
        "UseDualStack": false
    }
},
{
    "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
    "expect": {
        "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
    },
    "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": true,
        "UseDualStack": true
    }
},
{
    "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
    "expect":
{
        "endpoint": {
            "url": "https://license-manager-user-subscriptions-fips.us-iso-east-1.c2s.ic.gov"

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    }
  },
  "params": {
    "Region": "us-iso-east-1",
    "UseFIPS": true,
    "UseDualStack": false
  }
},
{
  "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
  "expect": {
    "error": "DualStack is enabled but this partition does not support DualStack"
  },
  "params": {
    "Region": "us-iso-east-1",
    "UseFIPS": false,
    "UseDualStack":
true
  }
},
{
  "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-user-subscriptions.us-iso-east-1.c2s.ic.gov"
    }
  },
  "params": {
    "Region": "us-iso-east-1",
    "UseFIPS": false,
    "UseDualStack": false
  }
},
{
  "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
  "expect": {
    "error": "FIPS and DualStack are enabled, but
this partition does not support one or both"
  },
  "params": {
    "Region": "us-isob-east-1",
    "UseFIPS": true,
    "UseDualStack": true
  }
},
{
  "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
  "expect": {

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        "endpoint": {
            "url": "https://license-manager-user-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
        }
    },
    "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": true,
        "UseDualStack": false
    }
},
{
    "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
    "expect": {
        "error": "DualStack is enabled but this partition does not support DualStack"
    },
    "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": false,
        "UseDualStack": true
    }
},
{
    "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager-user-subscriptions.us-isob-east-1.sc2s.sgov.gov"
        }
    },
    "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": false,
        "UseDualStack": false
    }
},
{
    "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
    "expect": {
        "endpoint": {
            "url": "https://example.com"
        }
    },
    "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": false,
        "Endpoint": "https://example.com"
    }
}

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```

    },
    {
      "documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
      "expect": {
        "endpoint": {
          "url": "https://example.com"
        }
      },
      "params": {
        "UseFIPS": false,
        "UseDualStack": false,
        "Endpoint": "https://example.com"
      }
    },
    {
      "documentation": "For custom endpoint with fips enabled and dualstack disabled",
      "expect": {
        "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
        "UseDualStack": false,
        "Endpoint": "https://example.com"
      }
    },
    {
      "documentation": "For custom endpoint with fips disabled and dualstack enabled",
      "expect": {
        "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": true,
        "Endpoint": "https://example.com"
      }
    },
    {
      "documentation": "Missing region",
      "expect": {
        "error": "Invalid Configuration: Missing Region"
      }
    }
  ],
  "version": "1.0"
}

```

```

    }
  },
  "com.amazonaws.licenseanagerusersubscriptions#ListIdentityProviders": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ListIdentityProvidersRequest"
    },
    "output": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ListIdentityProvidersResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licenseanagerusersubscriptions#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licenseanagerusersubscriptions#ConflictException"
      },
      {
        "target": "com.amazonaws.licenseanagerusersubscriptions#InternalServerError"
      },
      {
        "target": "com.amazonaws.licenseanagerusersubscriptions#ResourceNotFoundException"
      },
      {
        "target": "com.amazonaws.licenseanagerusersubscriptions#ServiceQuotaExceededException"
      },
      {
        "target": "com.amazonaws.licenseanagerusersubscriptions#ThrottlingException"
      },
      {
        "target": "com.amazonaws.licenseanagerusersubscriptions#ValidationException"
      }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Lists the identity providers for user-based subscriptions.</p>",
      "smithy.api#http": {
        "code": 200,
        "method": "POST",
        "uri": "/identity-provider/ListIdentityProviders"
      },
      "smithy.api#paginated":
    }
  }
}

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    },
    "com.amazonaws.licenseanagerusersubscriptions#ListIdentityProvidersRequest": {
      "type": "structure",
      "members": {
        "MaxResults": {
          "target": "com.amazonaws.licenseanagerusersubscriptions#BoxInteger",
          "traits": {
            "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
          }
        },
        "NextToken": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        }
      }
    },
    "com.amazonaws.licenseanagerusersubscriptions#ListIdentityProvidersResponse":
  {
    "type": "structure",
    "members": {
      "IdentityProviderSummaries": {
        "target": "com.amazonaws.licenseanagerusersubscriptions#IdentityProviderSummaryList",
        "traits": {
          "smithy.api#documentation": "<p>Metadata that describes the list identity providers operation.</p>",
          "smithy.api#required": {}
        }
      },
      "NextToken": {
        "target": "smithy.api#String",
        "traits": {
          "smithy.api#documentation": "<p>Token for the next set of results.</p>"
        }
      }
    }
  },
    "com.amazonaws.licenseanagerusersubscriptions#ListInstances": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licenseanagerusersubscriptions#ListInstancesRequest"
      },
      "output": {
        "target": "com.amazonaws.licenseanagerusersubscriptions#ListInstancesResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licenseanagerusersubscriptions#AccessDeniedException"
        }
      ]
    }
  }

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    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ConflictException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#InternalServerErrorException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ResourceNotFoundException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ServiceQuotaExceededException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ThrottlingException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Lists the EC2 instances providing user-based subscriptions.</p>",
    "smithy.api#http": {
      "code": 200,
      "method": "POST",
      "uri": "/instance/ListInstances"
    },
    "smithy.api#paginated": {
      "inputToken": "NextToken",
      "outputToken": "NextToken",
      "pageSize": "MaxResults",
      "items": "InstanceSummaries"
    }
  }
},
"com.amazonaws.licenseanagerusersubscriptions#ListInstancesRequest": {
  "type": "structure",
  "members": {
    "MaxResults": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#BoxInteger",
      "traits": {
        "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
      }
    },
    "NextToken": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    }
  }
}

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    }
  },
  "Filters": {
    "target": "com.amazonaws.licenseanagerusersubscriptions#FilterList",
    "traits": {
      "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those
that match one or\n    more sets of key-value pairs that you specify.</p>"
    }
  }
},
"com.amazonaws.licenseanagerusersubscriptions#ListInstancesResponse": {
  "type":
"structure",
  "members": {
    "InstanceSummaries": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#InstanceSummaryList",
      "traits": {
        "smithy.api#documentation": "<p>Metadata that describes the list instances operation.</p>"
      }
    },
    "NextToken": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    }
  }
},
"com.amazonaws.licenseanagerusersubscriptions#ListProductSubscriptions": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licenseanagerusersubscriptions#ListProductSubscriptionsRequest"
  },
  "output": {
    "target": "com.amazonaws.licenseanagerusersubscriptions#ListProductSubscriptionsResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ConflictException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#InternalServerErrorException"
    },
    {

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    "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
  },
  {
    "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
  },
  {
    "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
  },
  {
    "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
  }
],
"traits": {
  "smithy.api#documentation": "<p>Lists the user-based subscription products available from an identity provider.</p>",
  "smithy.api#http": {
    "code": 200,
    "method": "POST",
    "uri": "/user/ListProductSubscriptions"
  },
  "smithy.api#paginated": {
    "inputToken": "NextToken",
    "outputToken": "NextToken",
    "pageSize": "MaxResults",
    "items": "ProductUserSummaries"
  }
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest": {
  "type": "structure",
  "members": {
    "Product": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
        "smithy.api#required": {}
      }
    },
    "IdentityProvider": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
      "traits": {
        "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
        "smithy.api#required": {}
      }
    },
    "MaxResults": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",

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    "traits": {
      "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
    }
  },
  "Filters": {
    "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
    "traits": {
      "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those that match one or\n more sets of key-value pairs that you specify.</p>"
    }
  },
  "NextToken": {
    "target": "smithy.api#String",
    "traits": {
      "smithy.api#documentation": "<p>Token for the next set of results.</p>"
    }
  }
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {
  "type": "structure",
  "members": {
    "ProductUserSummaries": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
      "traits": {
        "smithy.api#documentation": "<p>Metadata that describes the list product subscriptions operation.</p>"
      }
    }
  },
  "NextToken": {
    "target": "smithy.api#String",
    "traits": {
      "smithy.api#documentation": "<p>Token for the next set of results.</p>"
    }
  }
},
"com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
  },
  "errors": [

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    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
    },
    {
      "target":
"com.amazonaws.licensemanagerusersubscriptions#InternalServerError"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Lists user associations for an identity provider.</p>",
    "smithy.api#http": {
      "code": 200,
      "method": "POST",
      "uri": "/user/ListUserAssociations"
    },
    "smithy.api#paginated":
{
  "inputToken": "NextToken",
  "outputToken": "NextToken",
  "pageSize": "MaxResults",
  "items": "InstanceUserSummaries"
}
  },
  "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest": {
    "type": "structure",
    "members": {
      "InstanceId": {
        "target": "smithy.api#String",
        "traits": {
          "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
          "smithy.api#required": {}
        }
      }
    }
  }
}

```

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    }
  },
  "IdentityProvider": {
    "target": "com.amazonaws.licenseanagerusersubscriptions#IdentityProvider",
    "traits": {
      "smithy.api#documentation": "<p>An object that specifies details for the identity
provider.</p>",
      "smithy.api#required": {}
    }
  },
  "MaxResults": {
    "target": "com.amazonaws.licenseanagerusersubscriptions#BoxInteger",
    "traits": {
      "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
    }
  },
  "Filters": {
    "target": "com.amazonaws.licenseanagerusersubscriptions#FilterList",
    "traits": {
      "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those
that match one or\n    more sets of key-value pairs that you specify.</p>"
    }
  },
  "NextToken": {
    "target": "smithy.api#String",
    "traits": {
      "smithy.api#documentation": "<p>Token for
the next set of results.</p>"
    }
  }
},
"com.amazonaws.licenseanagerusersubscriptions#ListUserAssociationsResponse": {
  "type": "structure",
  "members": {
    "InstanceUserSummaries": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#InstanceUserSummaryList",
      "traits": {
        "smithy.api#documentation": "<p>Metadata that describes the list user association operation.</p>"
      }
    },
    "NextToken": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    }
  }
}

```

```

    },
    "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {
      "type": "structure",
      "members": {
        "Username": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The user name from the identity provider of the user.</p>",
            "smithy.api#required": {}
          }
        },
        "Product": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
            "smithy.api#required": {}
          }
        },
        "IdentityProvider": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
          "traits": {
            "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
            "smithy.api#required": {}
          }
        }
      }
    },
    "Status": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The status of a product for a user.</p>",
        "smithy.api#required": {}
      }
    },
    "StatusMessage": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The status message for a product for a user.</p>"
      }
    },
    "Domain": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The domain name of the user.</p>"
      }
    },
    "SubscriptionStartDate": {
      "target": "smithy.api#String",

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    "traits": {
      "smithy.api#documentation": "<p>The
start date of a subscription.</p>"
    }
  },
  "SubscriptionEndDate": {
    "target": "smithy.api#String",
    "traits": {
      "smithy.api#documentation": "<p>The end date of a subscription.</p>"
    }
  }
},
"traits": {
  "smithy.api#documentation": "<p>The summary of the user-based subscription products for a user.</p>"
}
},
"com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"
  }
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerErrorException"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
    }
  ]
}

```

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    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Registers an identity provider for user-based subscriptions.</p>",
    "smithy.api#http": {
      "code": 200,
      "method": "POST",
      "uri": "/identity-provider/RegisterIdentityProvider"
    },
    "smithy.api#idempotent": {}
  }
},
"com.amazonaws.licenseanagerusersubscriptions#RegisterIdentityProviderRequest": {
  "type": "structure",
  "members": {
    "IdentityProvider": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#IdentityProvider",
      "traits": {
        "smithy.api#documentation": "<p>An object that specifies details for the identity
provider.</p>",
        "smithy.api#required": {}
      }
    },
    "Product": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
        "smithy.api#required": {}
      }
    },
    "Settings": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#Settings",
      "traits": {
        "smithy.api#documentation": "<p>The registered identity providers product related configuration
settings such as the\n    subnets to provision VPC endpoints.</p>"
      }
    }
  }
},
"com.amazonaws.licenseanagerusersubscriptions#RegisterIdentityProviderResponse": {
  "type": "structure",
  "members": {
    "IdentityProviderSummary":
{
      "target": "com.amazonaws.licenseanagerusersubscriptions#IdentityProviderSummary",

```



```

        "traits": {
            "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider
operation.</p>",
            "smithy.api#required": {}
        }
    },
    "com.amazonaws.licenseanagerusersubscriptions#ResourceNotFoundException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The resource couldn't be found.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 404
        }
    },
    "com.amazonaws.licenseanagerusersubscriptions#SecurityGroup": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 5,
                "max": 200
            },
            "smithy.api#pattern": "^sg-([0-9a-z]{8})([0-9a-z]{17})$"
        }
    },
    "com.amazonaws.licenseanagerusersubscriptions#ServiceQuotaExceededException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The request failed because a service quota is exceeded.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licenseanagerusersubscriptions#Settings": {
        "type": "structure",
        "members": {
            "Subnets": {

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    "target": "com.amazonaws.licenseanagerusersubscriptions#Subnets",
    "traits": {
      "smithy.api#documentation":
"<p>The subnets defined for the registered identity provider.</p>",
      "smithy.api#length": {
        "min": 1
      },
      "smithy.api#required": {}
    }
  },
  "SecurityGroupId": {
    "target": "com.amazonaws.licenseanagerusersubscriptions#SecurityGroup",
    "traits": {
      "smithy.api#documentation": "<p>A security group ID that allows inbound TCP port 1688
communication between resources in\n  your VPC and the VPC endpoint for activation servers.</p>",
      "smithy.api#required": {}
    }
  }
},
"traits": {
  "smithy.api#documentation": "<p>The registered identity providers product related configuration settings
such as the\n  subnets to provision VPC endpoints, and the security group ID that
is associated with the VPC\n  endpoints. The security group should permit inbound TCP port 1688
communication from resources\n  in the VPC.</p>"
}
},
"com.amazonaws.licenseanagerusersubscriptions#StartProductSubscription": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licenseanagerusersubscriptions#StartProductSubscriptionRequest"
  },
  "output": {
    "target": "com.amazonaws.licenseanagerusersubscriptions#StartProductSubscriptionResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ConflictException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#InternalServerErrorException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ResourceNotFoundException"
    },
    {

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    "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
  },
  {
    "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
  },
  {
    "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
  }
],
"traits": {
  "smithy.api#documentation": "<p>Starts a product subscription for a user with the specified identity provider.</p>\n    <note>\n      <p>Your estimated bill for charges on the number of users and related costs will take 48\n      hours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing status) in Amazon Web Services Billing. For more information, see <a href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n      monthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n    </note>",
  "smithy.api#http": {
    "code": 200,
    "method": "POST",
    "uri": "/user/StartProductSubscription"
  }
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {
  "type": "structure",
  "members": {
    "Username": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The user name from the identity provider of the user.</p>",
        "smithy.api#required": {}
      }
    },
    "IdentityProvider": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
      "traits": {
        "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
        "smithy.api#required": {}
      }
    },
    "Product": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
        "smithy.api#required": {}
      }
    }
  },
}

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```

    "Domain": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The domain name of the user.</p>"
      }
    }
  },
  "com.amazonaws.licenseanagerusersubscriptions#StartProductSubscriptionResponse": {
    "type": "structure",
    "members": {
      "ProductUserSummary": {
        "target": "com.amazonaws.licenseanagerusersubscriptions#ProductUserSummary",
        "traits": {
          "smithy.api#documentation": "<p>Metadata that describes the start product subscription operation.</p>",
          "smithy.api#required": {}
        }
      }
    }
  },
  "com.amazonaws.licenseanagerusersubscriptions#StopProductSubscription": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#StopProductSubscriptionRequest"
    },
    "output": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#StopProductSubscriptionResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licenseanagerusersubscriptions#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licenseanagerusersubscriptions#ConflictException"
      },
      {
        "target": "com.amazonaws.licenseanagerusersubscriptions#InternalServerErrorException"
      },
      {
        "target": "com.amazonaws.licenseanagerusersubscriptions#ResourceNotFoundException"
      },
      {
        "target": "com.amazonaws.licenseanagerusersubscriptions#ServiceQuotaExceededException"
      },
      {
        "target": "com.amazonaws.licenseanagerusersubscriptions#ThrottlingException"
      }
    ]
  },

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    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Stops a product subscription for a user with the specified identity
provider.</p>",
    "smithy.api#http": {
      "code": 200,
      "method": "POST",
      "uri": "/user/StopProductSubscription"
    }
  }
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
  "type": "structure",
  "members": {
    "Username": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
        "smithy.api#required": {}
      }
    },
    "IdentityProvider": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
      "traits": {
        "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
        "smithy.api#required": {}
      }
    }
  }
},
"Product": {
  "target": "smithy.api#String",
  "traits": {
    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
    "smithy.api#required": {}
  }
},
"Domain": {
  "target": "smithy.api#String",
  "traits": {
    "smithy.api#documentation": "<p>The domain name of the user.</p>"
  }
}
},

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"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse": {
  "type": "structure",
  "members": {
    "ProductUserSummary": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
      "traits": {
        "smithy.api#documentation":
"<p>Metadata that describes the start product subscription operation.</p>",
        "smithy.api#required": {}
      }
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#StringList": {
    "type": "list",
    "member": {
      "target": "smithy.api#String"
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#Subnet": {
    "type": "string",
    "traits": {
      "smithy.api#pattern": "subnet-[a-z0-9]{8,17}"
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#Subnets": {
    "type": "list",
    "member": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException": {
    "type": "structure",
    "members": {
      "message": {
        "target": "smithy.api#String"
      }
    },
    "traits": {
      "smithy.api#documentation": "<p>The request was denied because of request throttling. Retry the
request.</p>",
      "smithy.api#error": "client"
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {
    "type": "operation",
    "input": {

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    "target": "com.amazonaws.licenseanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
  },
  "output": {
    "target": "com.amazonaws.licenseanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#InternalServerError"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ThrottlingException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Updates additional product configuration settings for the registered
identity\n  provider.</p>",
    "smithy.api#http": {
      "code": 200,
      "method": "POST",
      "uri": "/identity-provider/UpdateIdentityProviderSettings"
    },
    "smithy.api#idempotent": {}
  }
},
"com.amazonaws.licenseanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
  "type": "structure",
  "members": {
    "IdentityProvider": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#IdentityProvider",
      "traits": {
        "smithy.api#required": {}
      }
    },
    "Product": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
        "smithy.api#required": {}
      }
    },
    "UpdateSettings": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#UpdateSettings",

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    "traits": {
      "smithy.api#documentation": "<p>Updates the registered identity providers product related
configuration settings. You can\n    update any combination of settings in a single operation such as the:</p>\n
<ul>\n    <li>\n        <p>Subnets which you want to add to provision VPC endpoints.</p>\n        </li>\n
    <li>\n        <p>Subnets which you want to remove the VPC endpoints from.</p>\n        </li>\n
    <li>\n        <p>Security group ID which permits traffic to the VPC endpoints.</p>\n        </li>\n    </ul>",
      "smithy.api#required": {}
    }
  },
  "com.amazonaws.licenseanagerusersubscriptions#UpdateIdentityProviderSettingsResponse": {
    "type": "structure",
    "members": {
      "IdentityProviderSummary": {
        "target": "com.amazonaws.licenseanagerusersubscriptions#IdentityProviderSummary",
        "traits": {
          "smithy.api#required": {}
        }
      }
    }
  },
  "com.amazonaws.licenseanagerusersubscriptions#UpdateSettings": {
    "type": "structure",
    "members": {
      "AddSubnets": {
        "target": "com.amazonaws.licenseanagerusersubscriptions#Subnets",
        "traits": {
          "smithy.api#documentation": "<p>The ID of one or more subnets in which License Manager will
create a VPC endpoint for products that\n    require connectivity to activation servers.</p>",
          "smithy.api#required": {}
        }
      },
      "RemoveSubnets": {
        "target": "com.amazonaws.licenseanagerusersubscriptions#Subnets",
        "traits": {
          "smithy.api#documentation": "<p>The ID of one or more subnets to remove.</p>",
          "smithy.api#required": {}
        }
      },
      "SecurityGroupId": {
        "target": "com.amazonaws.licenseanagerusersubscriptions#SecurityGroup",
        "traits": {
          "smithy.api#documentation": "<p>A security group ID
that allows inbound TCP port 1688 communication between resources in\n    your VPC and the VPC endpoints for
activation servers.</p>"
        }
      }
    }
  }
}

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    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Updates the registered identity providers product related configuration
settings such as\n    the subnets to provision VPC endpoints.</p>"
  }
},
"com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
  "type": "structure",
  "members": {
    "message": {
      "target": "smithy.api#String"
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>A parameter is not valid.</p>",
    "smithy.api#error": "client"
  }
}
}
}
{
  "smithy": "2.0",
  "metadata": {
    "suppressions": [
      {
        "id": "HttpMethodSemantics",
        "namespace": "*"
      },
      {
        "id": "HttpStatusCodeSemantics",
        "namespace": "*"
      },
      {
        "id": "PaginatedTrait",
        "namespace": "*"
      },
      {
        "id": "HttpHeaderTrait",
        "namespace": "*"
      },
      {
        "id": "HttpUriConflict",
        "namespace": "*"
      },
      {
        "id": "Service",
        "namespace": "*"
      }
    ]
  }
}

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    }
  ]
},
"shapes": {
  "com.amazonaws.licensemanager#AWSLicenseManager": {
    "type": "service",
    "version": "2018-08-01",
    "operations": [
      {
        "target": "com.amazonaws.licensemanager#AcceptGrant"
      },
      {
        "target": "com.amazonaws.licensemanager#CheckInLicense"
      },
      {
        "target": "com.amazonaws.licensemanager#CheckoutBorrowLicense"
      },
      {
        "target": "com.amazonaws.licensemanager#CheckoutLicense"
      },
      {
        "target": "com.amazonaws.licensemanager#CreateGrant"
      },
      {
        "target": "com.amazonaws.licensemanager#CreateGrantVersion"
      },
      {
        "target": "com.amazonaws.licensemanager#CreateLicense"
      },
      {
        "target": "com.amazonaws.licensemanager#CreateLicenseConfiguration"
      },
      {
        "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource"
      },
      {
        "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator"
      },
      {
        "target": "com.amazonaws.licensemanager#CreateLicenseVersion"
      },
      {
        "target": "com.amazonaws.licensemanager#CreateToken"
      },
      {
        "target": "com.amazonaws.licensemanager#DeleteGrant"
      },
    ],
  },
}

```

```

    {
      "target": "com.amazonaws.licensemanager#DeleteLicense"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteLicenseConfiguration"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteToken"
    },
    {
      "target": "com.amazonaws.licensemanager#ExtendLicenseConsumption"
    },
  },
  {
    "target": "com.amazonaws.licensemanager#GetAccessToken"
  },
  {
    "target": "com.amazonaws.licensemanager#GetGrant"
  },
  {
    "target": "com.amazonaws.licensemanager#GetLicense"
  },
  {
    "target": "com.amazonaws.licensemanager#GetLicenseConfiguration"
  },
  {
    "target": "com.amazonaws.licensemanager#GetLicenseConversionTask"
  },
  {
    "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGenerator"
  },
  {
    "target": "com.amazonaws.licensemanager#GetLicenseUsage"
  },
  {
    "target": "com.amazonaws.licensemanager#GetServiceSettings"
  },
  {
    "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration"
  },
  {
    "target": "com.amazonaws.licensemanager#ListDistributedGrants"
  },
  {
    "target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations"
  }

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},
{
  "target": "com.amazonaws.licensemanager#ListLicenseConfigurations"
},
{
  "target": "com.amazonaws.licensemanager#ListLicenseConversionTasks"
},
{
  "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators"
},
{
  "target": "com.amazonaws.licensemanager#ListLicenses"
},
{
  "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResource"
},
{
  "target": "com.amazonaws.licensemanager#ListLicenseVersions"
},
{
  "target": "com.amazonaws.licensemanager#ListReceivedGrants"
},
{
  "target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganization"
},
{
  "target": "com.amazonaws.licensemanager#ListReceivedLicenses"
},
{
  "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganization"
},
{
  "target": "com.amazonaws.licensemanager#ListResourceInventory"
},
{
  "target": "com.amazonaws.licensemanager#ListTagsForResource"
},
{
  "target": "com.amazonaws.licensemanager#ListTokens"
},
{
  "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfiguration"
},
{
  "target": "com.amazonaws.licensemanager#RejectGrant"
},
{

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```

    "target": "com.amazonaws.licensemanager#TagResource"
  },
  {
    "target": "com.amazonaws.licensemanager#UntagResource"
  },
  {
    "target": "com.amazonaws.licensemanager#UpdateLicenseConfiguration"
  },
  {
    "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator"
  },
  {
    "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource"
  },
  {
    "target": "com.amazonaws.licensemanager#UpdateServiceSettings"
  }
],
"traits": {
  "aws.api#service": {
    "sdkId": "License Manager",
    "arnNamespace": "license-manager",
    "cloudFormationName": "LicenseManager",
    "cloudTrailEventSource": "licensemanager.amazonaws.com",
    "endpointPrefix": "license-manager"
  },
  "aws.auth#sigv4": {
    "name": "license-manager"
  },
  "aws.protocols#awsJson1_1": {},
  "smithy.api#documentation": "<p>License Manager makes it easier to manage licenses from software vendors across multiple \n      Amazon Web Services accounts and on-premises servers.</p>",
  "smithy.api#title": "AWS License Manager",
  "smithy.api#xmlNamespace": {
    "uri": "https://license-manager.amazonaws.com/doc/2018_08_01"
  },
  "smithy.rules#endpointRuleSet": {
    "version": "1.0",
    "parameters": {
      "Region": {
        "builtIn": "AWS::Region",
        "required": false,
        "documentation": "The AWS region used to dispatch the request.",
        "type": "String"
      },
      "UseDualStack": {
        "builtIn": "AWS::UseDualStack",
        "required": true,

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```

    "default": false,
    "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not
support dual-stack, dispatching the request MAY return an error.",
    "type": "Boolean"
  },
  "UseFIPS": {
    "builtIn": "AWS::UseFIPS",
    "required": true,
    "default": false,
    "documentation": "When true, send
this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant
endpoint, dispatching the request will return an error.",
    "type": "Boolean"
  },
  "Endpoint": {
    "builtIn": "SDK::Endpoint",
    "required": false,
    "documentation": "Override the endpoint used to send this request",
    "type": "String"
  }
},
"rules": [
  {
    "conditions": [
      {
        "fn": "isSet",
        "argv": [
          {
            "ref": "Endpoint"
          }
        ]
      }
    ]
  }
],
"type": "tree",
"rules": [
  {
    "conditions": [
      {
        "fn": "booleanEquals",
        "argv": [
          {
            "ref": "UseFIPS"
          },
          true
        ]
      }
    ]
  }
],

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```

        "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
        "type": "error"
    },
    {
"conditions": [
        {
            "fn": "booleanEquals",
            "argv": [
                {
                    "ref": "UseDualStack"
                },
                true
            ]
        }
    ],
    "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
    "type": "error"
},
{
    "conditions": [],
    "endpoint": {
        "url": {
            "ref": "Endpoint"
        },
        "properties": {},
        "headers": {}
    },
    "type": "endpoint"
}
],
{
    "conditions": [
        {
            "fn": "isSet",
            "argv": [
                {
                    "ref": "Region"
                }
            ]
        }
    ]
},
"rules": [
    {
        "conditions": [
            {

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        "fn": "aws.partition",
        "argv": [
            {
                "ref": "Region"
            }
        ],
        "assign": "PartitionResult"
    }
],
"type": "tree",
"rules": [
    {
        "conditions": [
            {
                "fn": "booleanEquals",
                "argv": [
                    {
                        "ref":
"UseFIPS"
                    },
                    true
                ]
            },
            {
                "fn": "booleanEquals",
                "argv": [
                    {
                        "ref": "UseDualStack"
                    },
                    true
                ]
            }
        ]
    },
    {
        "fn": "booleanEquals",
        "argv": [
            true,
            {
                "fn": "getAttr",
                "argv": [
                    {
                        "ref": "PartitionResult"
                    }
                ],
                "supportsFIPS"
            }
        ]
    }
]

```



```

        ]
    }
    ]
  },
  {
    "fn": "booleanEquals",
    "argv": [
      true,
      {
        "fn": "getAttr",
        "argv": [
          {
            "ref": "PartitionResult"
          }
        ],
      }
    ],
  },
  "supportsDualStack"
    ]
  }
  ]
}
],
"type": "tree",
"rules": [
  {
    "conditions": [],
    "endpoint": {
      "url": "https://license-manager-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
      "properties": {},
      "headers": {}
    },
    "type": "endpoint"
  }
  ],
  {
    "conditions": [],
    "error": "FIPS and DualStack are enabled, but this partition does not support one or
both",
    "type": "error"
  }
  ],
  {
    "conditions": [
      {

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```

        "fn": "booleanEquals",

"argv": [
    {
        "ref": "UseFIPS"
    },
    true
]
}
],
"type": "tree",
"rules": [
    {
        "conditions": [
            {
                "fn": "booleanEquals",
                "argv": [
                    true,

{
                "fn": "getAttr",
                "argv": [
                    {
                        "ref": "PartitionResult"
                    },
                    "supportsFIPS"
                ]
            }
        ]
    }
],
"type": "tree",
"rules": [

{
        "conditions": [],
        "endpoint": {
            "url": "https://license-manager-fips.{Region}.{PartitionResult#dnsSuffix}",
            "properties": {},
            "headers": {}
        },
        "type": "endpoint"
    }
]
},
{
    "conditions": [],
    "error": "FIPS is enabled but this

```



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        },
        "type": "endpoint"
    }
]
},
{
    "conditions": [],
    "error": "DualStack is enabled but this partition does not support DualStack",
    "type": "error"
}
]
},
{
    "conditions": [],
    "endpoint": {
        "url": "https://license-manager.{Region}.{PartitionResult#dnsSuffix}",
        "properties": {},
        "headers": {}
    },
    "type": "endpoint"
}
]
}
],
{
    "conditions": [],
    "error": "Invalid Configuration: Missing Region",
    "type": "error"
}
]
},
"smithy.rules#endpointTests": {
    "testCases": [
        {
            "documentation": "For region af-south-1 with FIPS disabled and DualStack disabled",
            "expect": {
                "endpoint":
{
                    "url": "https://license-manager.af-south-1.amazonaws.com"
                }
            },
            "params": {
                "Region": "af-south-1",
                "UseFIPS": false,
                "UseDualStack": false
            }
        }
    ],
}

```

```

{
  "documentation": "For region ap-east-1 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.ap-east-1.amazonaws.com"
    }
  },
  "params": {
    "Region": "ap-east-1",
    "UseFIPS": false,
    "UseDualStack": false
  }
},
{
  "documentation": "For region ap-northeast-1 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.ap-northeast-1.amazonaws.com"
    }
  },
  "params": {
    "Region": "ap-northeast-1",
    "UseFIPS": false,
    "UseDualStack": false
  }
},
{
  "documentation": "For region ap-northeast-2 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.ap-northeast-2.amazonaws.com"
    }
  },
  "params": {
    "Region": "ap-northeast-2",
    "UseFIPS": false,
    "UseDualStack": false
  }
},
{
  "documentation": "For region ap-northeast-3 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.ap-northeast-3.amazonaws.com"
    }
  },
  "params": {
    "Region": "ap-northeast-3",

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```

        "UseFIPS": false,
        "UseDualStack": false
    }
},
{
    "documentation": "For region ap-south-1 with FIPS disabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager.ap-south-1.amazonaws.com"
        }
    },
    "params": {
        "Region": "ap-south-1",
        "UseFIPS": false,
        "UseDualStack": false
    }
},
{
    "documentation": "For region ap-southeast-1 with FIPS disabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager.ap-southeast-1.amazonaws.com"
        }
    },
    "params": {
        "Region": "ap-southeast-1",
        "UseFIPS": false,
        "UseDualStack": false
    }
},
{
    "documentation": "For region ap-southeast-2 with FIPS disabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager.ap-southeast-2.amazonaws.com"
        }
    },
    "params": {
        "Region": "ap-southeast-2",
        "UseFIPS": false,
        "UseDualStack": false
    }
},
{

```

```

"documentation": "For region ap-southeast-3 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.ap-southeast-3.amazonaws.com"
    }
  },
  "params": {
    "Region": "ap-southeast-3",
    "UseFIPS": false,
    "UseDualStack": false
  }
},
{
  "documentation": "For region ca-central-1 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.ca-central-1.amazonaws.com"
    }
  },
  "params": {
    "Region": "ca-central-1",
    "UseFIPS": false,
    "UseDualStack": false
  }
},
{
  "documentation": "For region eu-central-1 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.eu-central-1.amazonaws.com"
    }
  },
  "params": {
    "Region": "eu-central-1",
    "UseFIPS": false,
    "UseDualStack": false
  }
},
{
  "documentation": "For region eu-north-1 with FIPS
disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.eu-north-1.amazonaws.com"
    }
  },
  "params": {

```

```

        "Region": "eu-north-1",
        "UseFIPS": false,
        "UseDualStack": false
    }
},
{
    "documentation": "For region eu-south-1 with FIPS disabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager.eu-south-1.amazonaws.com"
        }
    },
    "params": {
        "Region":
"eu-south-1",
        "UseFIPS": false,
        "UseDualStack": false
    }
},
{
    "documentation": "For region eu-west-1 with FIPS disabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager.eu-west-1.amazonaws.com"
        }
    },
    "params": {
        "Region": "eu-west-1",
        "UseFIPS": false,
        "UseDualStack": false
    }
},
{
    "documentation": "For region eu-west-2 with FIPS disabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager.eu-west-2.amazonaws.com"
        }
    },
    "params": {
        "Region": "eu-west-2",
        "UseFIPS": false,
        "UseDualStack": false
    }
},
{
    "documentation": "For region eu-west-3 with FIPS disabled and DualStack disabled",

```



```

    "expect": {
      "endpoint": {
        "url": "https://license-manager.eu-west-3.amazonaws.com"
      }
    },
    "params": {
      "Region": "eu-west-3",
      "UseFIPS": false,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region me-south-1 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager.me-south-1.amazonaws.com"
      }
    },
    "params": {
      "Region": "me-south-1",
      "UseFIPS": false,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region sa-east-1 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager.sa-east-1.amazonaws.com"
      }
    },
    "params": {
      "Region": "sa-east-1",
      "UseFIPS": false,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager.us-east-1.amazonaws.com"
      }
    },
    "params": {
      "Region": "us-east-1",
      "UseFIPS": false,

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```

        "UseDualStack": false
    }
},
{
    "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager-fips.us-east-1.amazonaws.com"
        }
    },
    "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
        "UseDualStack": false
    }
},
{
    "documentation": "For region us-east-2 with FIPS disabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager.us-east-2.amazonaws.com"
        }
    },
    "params": {
        "Region": "us-east-2",
        "UseFIPS": false,
        "UseDualStack": false
    }
},
{
    "documentation": "For region us-east-2 with FIPS enabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager-fips.us-east-2.amazonaws.com"
        }
    },
    "params": {
        "Region": "us-east-2",
        "UseFIPS": true,
        "UseDualStack": false
    }
},
{
    "documentation": "For region
us-west-1 with FIPS disabled and DualStack disabled",
    "expect": {

```

```

        "endpoint": {
            "url": "https://license-manager.us-west-1.amazonaws.com"
        }
    },
    "params": {
        "Region": "us-west-1",
        "UseFIPS": false,
        "UseDualStack": false
    }
},
{
    "documentation": "For region us-west-1 with FIPS enabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager-fips.us-west-1.amazonaws.com"
        }
    },
    "params": {
        "Region": "us-west-1",
        "UseFIPS": true,
        "UseDualStack": false
    }
},
{
    "documentation": "For region us-west-2 with FIPS disabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager.us-west-2.amazonaws.com"
        }
    },
    "params": {
        "Region": "us-west-2",
        "UseFIPS": false,
        "UseDualStack": false
    }
},
{
    "documentation": "For region us-west-2 with FIPS enabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager-fips.us-west-2.amazonaws.com"
        }
    },
    "params": {
        "Region": "us-west-2",
        "UseFIPS": true,

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```

        "UseDualStack": false
    }
},
{
    "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager-fips.us-east-1.api.aws"
        }
    },
    "params": {
        "Region": "us-east-1",
        "UseFIPS": true,

        "UseDualStack": true
    }
},
{
    "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager.us-east-1.api.aws"
        }
    },
    "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": true
    }
},
{
    "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url":
"https://license-manager.cn-north-1.amazonaws.com.cn"
        }
    },
    "params": {
        "Region": "cn-north-1",
        "UseFIPS": false,
        "UseDualStack": false
    }
},
{
    "documentation": "For region cn-northwest-1 with FIPS disabled and DualStack disabled",
    "expect": {
        "endpoint": {

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```

        "url": "https://license-manager.cn-northwest-1.amazonaws.com.cn"
    }
},
"params": {
    "Region": "cn-northwest-1",
    "UseFIPS": false,
    "UseDualStack": false
}
},
{
    "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager-fips.cn-north-1.api.amazonwebservices.com.cn"
        }
    },
    "params": {
        "Region": "cn-north-1",
        "UseFIPS": true,
        "UseDualStack": true
    }
},
{
    "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager-fips.cn-north-1.amazonaws.com.cn"
        }
    },
    "params": {
        "Region": "cn-north-1",
        "UseFIPS": true,
        "UseDualStack": false
    }
},
{
    "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager.cn-north-1.api.amazonwebservices.com.cn"
        }
    },
    "params": {
        "Region": "cn-north-1",
        "UseFIPS": false,
        "UseDualStack": true
    }
}

```

```

    },
    {
      "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.us-gov-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-fips.us-gov-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-gov-west-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.us-gov-west-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-gov-west-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation":
"\"For region us-gov-west-1 with FIPS enabled and DualStack disabled\",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-fips.us-gov-west-1.amazonaws.com"
        }
      }
    }
  ]
}

```

```

    },
    "params": {
      "Region": "us-gov-west-1",
      "UseFIPS": true,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-fips.us-gov-east-1.api.aws"
      }
    }
  },
  "params": {
    "Region": "us-gov-east-1",
    "UseFIPS": true,
    "UseDualStack": true
  }
},
{
  "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.us-gov-east-1.api.aws"
    }
  },
  "params": {
    "Region": "us-gov-east-1",
    "UseFIPS": false,
    "UseDualStack": true
  }
},
{
  "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.us-iso-east-1.c2s.ic.gov"
    }
  },
  "params": {
    "Region": "us-iso-east-1",
    "UseFIPS": false,
    "UseDualStack": false
  }
},

```

```

{
  "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
  "expect": {
    "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
  },
  "params": {
    "Region": "us-iso-east-1",
    "UseFIPS": true,
    "UseDualStack": true
  }
},
{
  "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-fips.us-iso-east-1.c2s.ic.gov"
    }
  },
  "params": {
    "Region": "us-iso-east-1",
    "UseFIPS": true,
    "UseDualStack": false
  }
},
{
  "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
  "expect": {
    "error": "DualStack is enabled
but this partition does not support DualStack"
  },
  "params": {
    "Region": "us-iso-east-1",
    "UseFIPS": false,
    "UseDualStack": true
  }
},
{
  "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.us-isob-east-1.sc2s.sgov.gov"
    }
  },
  "params": {
    "Region": "us-isob-east-1",
    "UseFIPS": false,
    "UseDualStack": false
  }
}

```



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    },
    {
      "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
      },
      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": true,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-fips.us-isob-east-1.sc2s.sgov.gov"
        }
      },
      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
      "expect": {
        "error": "DualStack is enabled but this partition does not support DualStack"
      },
      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": false,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
      "expect": {
        "endpoint": {
          "url": "https://example.com"
        }
      },
      "params": {
        "Region": "us-east-1",

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        "UseFIPS": false,
        "UseDualStack": false,
        "Endpoint": "https://example.com"
    }
},
{
    "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
    "expect": {
        "endpoint": {
            "url": "https://example.com"
        }
    },
    "params": {
        "UseFIPS": false,
        "UseDualStack": false,
        "Endpoint": "https://example.com"
    }
},
{
    "documentation": "For custom endpoint with fips enabled and dualstack disabled",
    "expect": {
        "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
    },
    "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
        "UseDualStack": false,
        "Endpoint": "https://example.com"
    }
},
{
    "documentation": "For custom endpoint with fips disabled and dualstack enabled",
    "expect": {
        "error":
"Invalid Configuration: Dualstack and custom endpoint are not supported"
    },
    "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": true,
        "Endpoint": "https://example.com"
    }
},
{
    "documentation": "Missing region",
    "expect": {

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        "error": "Invalid Configuration: Missing Region"
      }
    }
  ],
  "version": "1.0"
}
},
"com.amazonaws.licensemanager#AcceptGrant": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#AcceptGrantRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#AcceptGrantResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ]
},
"traits": {
  "smithy.api#documentation": "<p>Accepts the specified grant.</p>"
}
},
"com.amazonaws.licensemanager#AcceptGrantRequest": {
  "type": "structure",
  "members": {

```

```

"GrantArn": {
  "target": "com.amazonaws.licensemanager#Arn",
  "traits": {
    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
    "smithy.api#required": {}
  }
},
"traits": {
  "smithy.api#input": {}
},
"com.amazonaws.licensemanager#AcceptGrantResponse": {
  "type": "structure",
  "members": {
    "GrantArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>Grant
ARN.</p>"
      }
    },
    "Status": {
      "target": "com.amazonaws.licensemanager#GrantStatus",
      "traits": {
        "smithy.api#documentation": "<p>Grant status.</p>"
      }
    },
    "Version": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Grant version.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#AccessDeniedException": {
  "type": "structure",
  "members": {
    "Message": {
      "target": "com.amazonaws.licensemanager#Message"
    }
  },
  "traits": {
    "aws.protocols#awsQueryError": {}
  }
}

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```

"code": "ServiceAccessDenied",
  "httpResponseCode": 401
},
"smithy.api#documentation": "<p>Access to resource denied.</p>",
"smithy.api#error": "client",
"smithy.api#httpError": 401
}
},
"com.amazonaws.licensemanager#ActivationOverrideBehavior": {
  "type": "enum",
  "members": {
    "DISTRIBUTED_GRANTS_ONLY": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "DISTRIBUTED_GRANTS_ONLY"
      }
    },
    "ALL_GRANTS_PERMITTED_BY_ISSUER": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "ALL_GRANTS_PERMITTED_BY_ISSUER"
      }
    }
  }
},
"com.amazonaws.licensemanager#AllowedOperation": {
  "type": "enum",
  "members": {
    "CREATE_GRANT": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "CreateGrant"
      }
    },
    "CHECKOUT_LICENSE": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "CheckoutLicense"
      }
    },
    "CHECKOUT_BORROW_LICENSE": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "CheckoutBorrowLicense"
      }
    }
  }
},

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"CHECK_IN_LICENSE": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "CheckInLicense"
  }
},
"EXTEND_CONSUMPTION_LICENSE": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "ExtendConsumptionLicense"
  }
},
"LIST_PURCHASED_LICENSES": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "ListPurchasedLicenses"
  }
},
"CREATE_TOKEN": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "CreateToken"
  }
}
},
"com.amazonaws.licensemanager#AllowedOperationList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#AllowedOperation"
  },
  "traits": {
    "smithy.api#length": {
      "min": 1,
      "max":
7
    }
  }
},
"com.amazonaws.licensemanager#Arn": {
  "type": "string",
  "traits": {
    "smithy.api#length": {
      "min": 0,
      "max": 2048
    },
    "smithy.api#pattern": "^arn:aws(-(cn|us-gov|iso-b|iso-c|iso-d))?:[A-Za-z0-9][A-Za-z0-9_/.-]{0,62}:[A-Za-

```

```

z0-9_/_-]{0,63}:[A-Za-z0-9_/_-]{0,63}:[A-Za-z0-9][A-Za-z0-9:_/+=@.-]{0,1023}$"
  }
},
"com.amazonaws.licensemanager#ArnList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#Arn"
  }
},
"com.amazonaws.licensemanager#AuthorizationException": {
  "type": "structure",
  "members": {
    "Message": {
      "target": "com.amazonaws.licensemanager#Message"
    }
  },
  "traits": {
    "aws.protocols#awsQueryError":
  {
    "code": "AuthorizationFailure",
    "httpResponseCode": 403
  },
    "smithy.api#documentation": "<p>The Amazon Web Services user account does not have permission to
perform the action. Check the IAM\n      policy associated with this account.</p>",
    "smithy.api#error": "client",
    "smithy.api#httpError": 403
  }
},
"com.amazonaws.licensemanager#AutomatedDiscoveryInformation": {
  "type": "structure",
  "members": {
    "LastRunTime": {
      "target": "com.amazonaws.licensemanager#DateTime",
      "traits": {
        "smithy.api#documentation": "<p>Time that automated discovery last ran.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Describes automated discovery.</p>"
  }
},
"com.amazonaws.licensemanager#Boolean": {
  "type": "boolean",
  "traits": {
    "smithy.api#default": false
  }
}

```

```

    },
    "com.amazonaws.licensemanager#BorrowConfiguration": {
      "type": "structure",
      "members": {
        "AllowEarlyCheckIn": {
          "target": "com.amazonaws.licensemanager#BoxBoolean",
          "traits": {
            "smithy.api#documentation": "<p>Indicates whether early check-ins are allowed.</p>",
            "smithy.api#required": {}
          }
        },
        "MaxTimeToLiveInMinutes": {
          "target": "com.amazonaws.licensemanager#BoxInteger",
          "traits": {
            "smithy.api#documentation": "<p>Maximum time for the borrow configuration, in minutes.</p>",
            "smithy.api#required": {}
          }
        }
      }
    },
    "traits": {
      "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
    }
  },
  "com.amazonaws.licensemanager#BoxBoolean": {
    "type": "boolean"
  },
  "com.amazonaws.licensemanager#BoxInteger": {
    "type": "integer"
  },
  "com.amazonaws.licensemanager#BoxLong": {
    "type": "long"
  },
  "com.amazonaws.licensemanager#CheckInLicense": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#CheckInLicenseRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#CheckInLicenseResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      }
    ]
  }
}

```



```

    },
    {
      "target": "com.amazonaws.licensemanager#ConflictException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Checks in the specified license. Check in a license when it is no longer
in use.</p>"
  }
},
"com.amazonaws.licensemanager#CheckInLicenseRequest":
{
  "type": "structure",
  "members": {
    "LicenseConsumptionToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>License consumption token.</p>",
        "smithy.api#required": {}
      }
    },
    "Beneficiary": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>License beneficiary.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#CheckInLicenseResponse": {

```

```

    "type": "structure",
    "members": {},
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#CheckoutBorrowLicense":
  {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#EntitlementNotAllowedException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
      },
      {
        "target":
"com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#RedirectException"
      },
      {
        "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
      },
      {
        "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
      },
      {

```

```

        "target": "com.amazonaws.licensemanager#ValidationException"
    }
],
"traits": {
    "smithy.api#documentation": "<p>Checks out the specified license for offline use.</p>"
}
},
"com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest": {
    "type": "structure",
    "members":
    {
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license. The license must use the borrow consumption configuration.</p>",
                "smithy.api#required": {}
            }
        },
        "Entitlements": {
            "target": "com.amazonaws.licensemanager#EntitlementDataList",
            "traits": {
                "smithy.api#documentation": "<p>License entitlements. Partial checkouts are not supported.</p>",
                "smithy.api#required": {}
            }
        },
        "DigitalSignatureMethod": {
            "target": "com.amazonaws.licensemanager#DigitalSignatureMethod",
            "traits": {
                "smithy.api#documentation": "<p>Digital signature method. The possible value is JSON Web Signature (JWS) algorithm PS384.\n    For more information, see <a href='\"https://tools.ietf.org/html/rfc7518#section-3.5\"'>RFC 7518 Digital Signature with RSASSA-PSS</a>.</p>",
                "smithy.api#required": {}
            }
        },
        "NodeId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Node ID.</p>"
            }
        },
        "CheckoutMetadata": {
            "target": "com.amazonaws.licensemanager#MetadataList",
            "traits": {
                "smithy.api#documentation": "<p>Information about constraints.</p>"
            }
        },
        "ClientToken": {

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        "target": "com.amazonaws.licensemanager#ClientToken",
        "traits": {
            "smithy.api#documentation":
"<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
            "smithy.api#required": {}
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse": {
    "type": "structure",
    "members": {
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
            }
        },
        "LicenseConsumptionToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License consumption token.</p>"
            }
        },
        "EntitlementsAllowed":
{
            "target": "com.amazonaws.licensemanager#EntitlementDataList",
            "traits": {
                "smithy.api#documentation": "<p>Allowed license entitlements.</p>"
            }
        },
        "NodeId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Node ID.</p>"
            }
        },
        "SignedToken": {
            "target": "com.amazonaws.licensemanager#SignedToken",
            "traits": {
                "smithy.api#documentation": "<p>Signed token.</p>"
            }
        },
        "IssuedAt": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",

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    "traits": {
      "smithy.api#documentation": "<p>Date and time at which the license checkout
is issued.</p>"
    }
  },
  "Expiration": {
    "target": "com.amazonaws.licensemanager#ISO8601DateTime",
    "traits": {
      "smithy.api#documentation": "<p>Date and time at which the license checkout expires.</p>"
    }
  },
  "CheckoutMetadata": {
    "target": "com.amazonaws.licensemanager#MetadataList",
    "traits": {
      "smithy.api#documentation": "<p>Information about constraints.</p>"
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#CheckoutLicense": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#CheckoutLicenseRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#CheckoutLicenseResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#RedirectException"
    }
  ]
}

```

```

    },
    {
      "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
    },
    {
      "target":
"com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Checks out the specified license.</p>\n    <note>\n    <p>If the
account that created the license is the same that is performing the check out, you must\n    specify the account
as the beneficiary.</p>\n    </note>"
  }
},
"com.amazonaws.licensemanager#CheckoutLicenseRequest": {
  "type": "structure",
  "members": {
    "ProductSKU": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Product
SKU.</p>",
        "smithy.api#required": {}
      }
    },
    "CheckoutType": {
      "target": "com.amazonaws.licensemanager#CheckoutType",
      "traits": {
        "smithy.api#documentation": "<p>Checkout type.</p>",
        "smithy.api#required": {}
      }
    }
  },
  "KeyFingerprint": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Key fingerprint identifying the license.</p>",
      "smithy.api#required": {}
    }
  },
  "Entitlements": {
    "target": "com.amazonaws.licensemanager#EntitlementDataList",

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```

    "traits": {
      "smithy.api#documentation": "<p>License entitlements.</p>",
    }
  "smithy.api#required": {}
},
"ClientToken": {
  "target": "com.amazonaws.licensemanager#ClientToken",
  "traits": {
    "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
    "smithy.api#required": {}
  }
},
"Beneficiary": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>License beneficiary.</p>"
  }
},
"NodeId": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Node ID.</p>"
  }
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CheckoutLicenseResponse": {
  "type": "structure",
  "members": {
    "CheckoutType": {
      "target": "com.amazonaws.licensemanager#CheckoutType",
      "traits": {
        "smithy.api#documentation": "<p>Checkout type.</p>"
      }
    },
    "LicenseConsumptionToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>License consumption token.</p>"
      }
    },
    "EntitlementsAllowed": {

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```

    "target": "com.amazonaws.licensemanager#EntitlementDataList",
    "traits": {
      "smithy.api#documentation": "<p>Allowed license entitlements.</p>"
    }
  },
  "SignedToken": {
    "target": "com.amazonaws.licensemanager#SignedToken",
    "traits": {
      "smithy.api#documentation": "<p>Signed token.</p>"
    }
  },
  "NodeId": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Node ID.</p>"
    }
  },
  "IssuedAt": {
    "target": "com.amazonaws.licensemanager#ISO8601DateTime",
    "traits": {
      "smithy.api#documentation": "<p>Date and time at which the license checkout is issued.</p>"
    }
  },
  "Expiration": {
    "target": "com.amazonaws.licensemanager#ISO8601DateTime",
    "traits": {
      "smithy.api#documentation": "<p>Date and
time at which the license checkout expires.</p>"
    }
  },
  "LicenseArn": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the checkout license.</p>"
    }
  }
},
"traits": {
  "smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CheckoutType": {
  "type": "enum",
  "members": {
    "PROVISIONAL": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "PROVISIONAL"
      }
    }
  }
}

```



```

    }
  },
  "PERPETUAL": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "PERPETUAL"
    }
  }
},
"com.amazonaws.licensemanager#ClientRequestToken": {
  "type": "string",
  "traits": {
    "smithy.api#length": {
      "min": 1,
      "max": 36
    }
  }
},
"com.amazonaws.licensemanager#ClientToken": {
  "type": "string",
  "traits": {
    "smithy.api#length": {
      "min": 0,
      "max": 2048
    },
    "smithy.api#pattern": "^\\S+$"
  }
},
"com.amazonaws.licensemanager#ConflictException": {
  "type": "structure",
  "members": {
    "Message": {
      "target": "com.amazonaws.licensemanager#Message"
    }
  },
  "traits": {
    "aws.protocols#awsQueryError": {
      "code": "ConflictException",
      "httpResponseCode":
409
    },
    "smithy.api#documentation": "<p>There was a conflict processing the request. Try your request
again.</p>",
    "smithy.api#error": "client",
    "smithy.api#httpError": 409
  }
},

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"com.amazonaws.licensemanager#ConsumedLicenseSummary": {
  "type": "structure",
  "members": {
    "ResourceType": {
      "target": "com.amazonaws.licensemanager#ResourceType",
      "traits": {
        "smithy.api#documentation": "<p>Resource type of the resource consuming a license.</p>"
      }
    },
    "ConsumedLicenses": {
      "target": "com.amazonaws.licensemanager#BoxLong",
      "traits": {
        "smithy.api#documentation": "<p>Number of licenses consumed by the resource.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Details about license consumption.</p>"
  }
},
"com.amazonaws.licensemanager#ConsumedLicenseSummaryList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#ConsumedLicenseSummary"
  }
},
"com.amazonaws.licensemanager#ConsumptionConfiguration": {
  "type": "structure",
  "members": {
    "RenewType": {
      "target": "com.amazonaws.licensemanager#RenewType",
      "traits": {
        "smithy.api#documentation": "<p>Renewal frequency.</p>"
      }
    },
    "ProvisionalConfiguration": {
      "target": "com.amazonaws.licensemanager#ProvisionalConfiguration",
      "traits": {
        "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
      }
    },
    "BorrowConfiguration": {
      "target": "com.amazonaws.licensemanager#BorrowConfiguration",
      "traits": {
        "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
      }
    }
  }
}

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    },
    "traits": {
      "smithy.api#documentation": "<p>Details about a consumption configuration.</p>"
    }
  },
  "com.amazonaws.licensemanager#CreateGrant": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#CreateGrantRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#CreateGrantResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target":
"com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
      },
      {
        "target": "com.amazonaws.licensemanager#ValidationException"
      }
    ]
  },
  "traits": {
    "smithy.api#documentation": "<p>Creates a grant for the specified license. A grant shares the use of
license\n entitlements with a specific Amazon Web Services account, an organization, or an\n
organizational unit (OU). For more
information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-
licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
  }
},
"com.amazonaws.licensemanager#CreateGrantRequest": {
  "type": "structure",
  "members": {

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"ClientToken": {
  "target": "com.amazonaws.licensemanager#ClientToken",
  "traits": {
    "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",
    "smithy.api#required": {}
  }
},
"GrantName": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Grant name.</p>",
    "smithy.api#required": {}
  }
}
},
"LicenseArn": {
  "target": "com.amazonaws.licensemanager#Arn",
  "traits": {
    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
    "smithy.api#required": {}
  }
},
"Principals": {
  "target": "com.amazonaws.licensemanager#PrincipalArnList",
  "traits": {
    "smithy.api#documentation": "<p>The grant principals. You can specify one of the following as an
Amazon Resource Name (ARN):</p>
<ul>
<li><p>An Amazon Web Services
account, which includes only the account specified.</p>
</li>
<li><p>An organizational unit (OU), which includes all accounts in the OU.</p>
</li>
<li><p>An organization, which will include all accounts across your organization.</p>
</li>
</ul>",
    "smithy.api#required": {}
  }
},
"HomeRegion": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Home Region of the grant.</p>",
    "smithy.api#required": {}
  }
},
"AllowedOperations": {
  "target": "com.amazonaws.licensemanager#AllowedOperationList",
  "traits": {
    "smithy.api#documentation": "<p>Allowed operations for the grant.</p>",
    "smithy.api#required": {}
  }
}

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    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},

"com.amazonaws.licensemanager#CreateGrantResponse": {
  "type": "structure",
  "members": {
    "GrantArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>Grant ARN.</p>"
      }
    },
    "Status": {
      "target": "com.amazonaws.licensemanager#GrantStatus",
      "traits": {
        "smithy.api#documentation": "<p>Grant status.</p>"
      }
    },
    "Version": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Grant version.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},

"com.amazonaws.licensemanager#CreateGrantVersion":
{
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#CreateGrantVersionRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#CreateGrantVersionResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {

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    "target": "com.amazonaws.licensemanager#AuthorizationException"
  },
  {
    "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
  },
  {
    "target": "com.amazonaws.licensemanager#RateLimitExceededException"
  },
  {
    "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
  },
  {
    "target": "com.amazonaws.licensemanager#ServerInternalException"
  },
  {
    "target": "com.amazonaws.licensemanager#ValidationException"
  }
],
"traits": {
  "smithy.api#documentation": "<p>Creates a new version of the specified grant. For more information, see\n    <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
}
},
"com.amazonaws.licensemanager#CreateGrantVersionRequest": {
  "type": "structure",
  "members": {
    "ClientToken": {
      "target": "com.amazonaws.licensemanager#ClientToken",
      "traits": {
        "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
      }
    }
  }
},
"GrantArn": {
  "target": "com.amazonaws.licensemanager#Arn",
  "traits": {
    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
    "smithy.api#required": {}
  }
},
"GrantName": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Grant name.</p>"
  }
}

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    },
    "AllowedOperations": {
      "target": "com.amazonaws.licensemanager#AllowedOperationList",
      "traits": {
        "smithy.api#documentation": "<p>Allowed operations for the grant.</p>"
      }
    },
    "Status": {
      "target": "com.amazonaws.licensemanager#GrantStatus",
      "traits": {
        "smithy.api#documentation": "<p>Grant status.</p>"
      }
    },
    "StatusReason": {
      "target": "com.amazonaws.licensemanager#StatusReasonMessage",
      "traits": {
        "smithy.api#documentation": "<p>Grant status reason.</p>"
      }
    },
    "SourceVersion": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Current version of the grant.</p>"
      }
    },
    "Options": {
      "target": "com.amazonaws.licensemanager#Options",
      "traits": {
        "smithy.api#documentation": "<p>The options specified for the grant.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#CreateGrantVersionResponse": {
  "type": "structure",
  "members": {
    "GrantArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>Grant ARN.</p>"
      }
    },
    "Status": {
      "target": "com.amazonaws.licensemanager#GrantStatus",
      "traits": {

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    }
  },
  "com.amazonaws.licensemanager#CreateLicenseConfiguration": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
      }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Creates a license configuration.</p>\n    <p>A license configuration is an abstraction of a customer license agreement that can be\n    consumed and enforced by License Manager. Components include specifications for the license\n    type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n    Dedicated Instance, Dedicated Host, or all of these), license affinity to host (how long a \n    license must be associated with a host), and the number of licenses purchased and used.</p>"
    }
  },
  "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest": {
    "type": "structure",
    "members": {
      "Name": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Name of the license configuration.</p>",
          "smithy.api#required": {}
        }
      }
    }
  }
}

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},
"Description": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Description of the license configuration.</p>"
  }
},
"LicenseCountingType": {
  "target": "com.amazonaws.licensemanager#LicenseCountingType",
  "traits": {
    "smithy.api#documentation": "<p>Dimension used to track the license inventory.</p>",
    "smithy.api#required": {}
  }
},
"LicenseCount": {
  "target": "com.amazonaws.licensemanager#BoxLong",
  "traits": {
    "smithy.api#documentation": "<p>Number of licenses managed by the license configuration.</p>"
  }
},
"LicenseCountHardLimit": {
  "target": "com.amazonaws.licensemanager#BoxBoolean",
  "traits": {
    "smithy.api#documentation": "<p>Indicates whether hard or soft license enforcement is used. Exceeding a hard limit\n blocks the launch of new instances.</p>"
  }
},
"LicenseRules": {
  "target":
"com.amazonaws.licensemanager#StringList",
  "traits": {
    "smithy.api#documentation": "<p>License rules. The syntax is #name=value (for example, #allowedTenancy=EC2-DedicatedHost). The available rules \n vary by dimension, as follows.</p>\n
<ul>\n
  <li>\n
    <p>\n
      <code>Cores</code> dimension: <code>allowedTenancy</code> |\n
      <code>licenseAffinityToHost</code> |\n
      <code>maximumCores</code> |
      <code>minimumCores</code>\n
    </p>\n
    </li>\n
    <li>\n
      <p>\n
        <code>Instances</code> dimension: <code>allowedTenancy</code> |\n
        <code>maximumCores</code> |
        <code>minimumCores</code> |\n
        <code>maximumSockets</code> | <code>minimumSockets</code> |\n
        <code>maximumVcpus</code> | <code>minimumVcpus</code>\n
      </p>\n
    </li>\n
    <li>\n
      <p>\n
        <code>Sockets</code> dimension: <code>allowedTenancy</code> |\n
        <code>licenseAffinityToHost</code> |\n
        <code>maximumSockets</code> |
        <code>minimumSockets</code>\n
      </p>\n
    </li>\n
    <li>\n
      <p>\n
        <code>vCPUs</code> dimension: <code>allowedTenancy</code> | \n
        <code>honorVcpuOptimization</code> | \n
        <code>maximumVcpus</code> |
        <code>minimumVcpus</code>\n
      </p>\n
    </li>\n
  </ul>\n
  <p>The unit for
  <code>licenseAffinityToHost</code> is days and the range is 1 to 180. The possible \n values for
  <code>allowedTenancy</code> are <code>EC2-Default</code>, <code>EC2-DedicatedHost</code>, and \n

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<code>EC2-DedicatedInstance</code>. The possible values for <code>honorVcpuOptimization</code> are \n <code>True</code> and <code>False</code>.</p>"

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    }
  },

  "Tags": {
    "target": "com.amazonaws.licensemanager#TagList",
    "traits": {
      "smithy.api#documentation": "<p>Tags to add to the license configuration.</p>"
    }
  },
  "DisassociateWhenNotFound": {
    "target": "com.amazonaws.licensemanager#BoxBoolean",
    "traits": {
      "smithy.api#documentation": "<p>When true, disassociates a resource when software is
uninstalled.</p>"
    }
  },
  "ProductInformationList": {
    "target": "com.amazonaws.licensemanager#ProductInformationList",
    "traits": {
      "smithy.api#documentation": "<p>Product information.</p>"
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#CreateLicenseConfigurationResponse":
{
  "type": "structure",
  "members": {
    "LicenseConfigurationArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest"
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    },
    "output": {
      "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
      },
      {
        "target": "com.amazonaws.licensemanager#ValidationException"
      }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Creates a new license conversion task.</p>"
    }
  },
  "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest": {
    "type": "structure",
    "members": {
      "ResourceArn": {
        "target": "com.amazonaws.licensemanager#Arn",
        "traits": {
          "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource you are converting the license type for.</p>",
          "smithy.api#required": {}
        }
      },
      "SourceLicenseContext": {
        "target": "com.amazonaws.licensemanager#LicenseConversionContext",
        "traits": {
          "smithy.api#documentation": "<p>Information that identifies the license type you are converting from. \n\n For the structure of the source license, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/conversion-procedures.html#conversion-cli\">Convert a license type using the CLI </a> in the <i>License Manager User Guide</i>.</p>",
          "smithy.api#required": {}
        }
      }
    }
  }
}

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    }
  },
  "DestinationLicenseContext":
{
  "target": "com.amazonaws.licensemanager#LicenseConversionContext",
  "traits": {
    "smithy.api#documentation": "<p>Information that identifies the license type you are converting to.
For the structure of the destination license, see <a href=\"https://docs.aws.amazon.com/license-
manager/latest/userguide/conversion-procedures.html#conversion-cli\">Convert a license type using the CLI </a> in
the <i>License Manager User Guide</i>.</p>",
    "smithy.api#required": {}
  }
},
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse": {
  "type": "structure",
  "members": {
    "LicenseConversionTaskId": {
      "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",

      "traits": {
        "smithy.api#documentation": "<p>The ID of the created license type conversion task.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    }
  ],

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    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Creates a report generator.</p>"
  }
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest": {
  "type": "structure",
  "members": {
    "ReportGeneratorName":
    {
      "target": "com.amazonaws.licensemanager#ReportGeneratorName",
      "traits": {
        "smithy.api#documentation": "<p>Name of the report generator.</p>",
        "smithy.api#required": {}
      }
    },
    "Type": {
      "target": "com.amazonaws.licensemanager#ReportTypeList",
      "traits": {
        "smithy.api#documentation": "<p>Type of reports to generate. The following report types an be generated:</p>\n      <ul>\n        <li>\n          <p>License configuration report - Reports the number and details of consumed licenses for a license configuration.</p>\n        </li>\n        <li>\n          <p>Resource report - Reports the tracked licenses and resource consumption for a license configuration.</p>\n        </li>\n      </ul>",
        "smithy.api#required": {}
      }
    }
  }
},
"ReportContext": {
  "target": "com.amazonaws.licensemanager#ReportContext",

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    "traits": {
      "smithy.api#documentation": "<p>Defines the type of license configuration the report generator
tracks.</p>",
      "smithy.api#required": {}
    }
  },
  "ReportFrequency": {
    "target": "com.amazonaws.licensemanager#ReportFrequency",
    "traits": {
      "smithy.api#documentation": "<p>Frequency by which reports are generated. Reports can be
generated daily, monthly, or weekly.</p>",
      "smithy.api#required": {}
    }
  },
  "ClientToken": {
    "target": "com.amazonaws.licensemanager#ClientRequestToken",
    "traits": {
      "smithy.api#documentation": "<p>Unique,
case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
      "smithy.api#required": {}
    }
  },
  "Description": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Description of the report generator.</p>"
    }
  },
  "Tags": {
    "target": "com.amazonaws.licensemanager#TagList",
    "traits": {
      "smithy.api#documentation": "<p>Tags to add to the report generator.</p>"
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse": {
  "type": "structure",
  "members": {
    "LicenseManagerReportGeneratorArn":
{
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the new report
generator.</p>"

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    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#CreateLicenseRequest": {
  "type": "structure",
  "members": {
    "LicenseName": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>License name.</p>",
        "smithy.api#required": {}
      }
    },
    "ProductName": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Product
name.</p>",
        "smithy.api#required": {}
      }
    },
    "ProductSKU": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Product SKU.</p>",
        "smithy.api#required": {}
      }
    },
    "Issuer": {
      "target": "com.amazonaws.licensemanager#Issuer",
      "traits": {
        "smithy.api#documentation": "<p>License issuer.</p>",
        "smithy.api#required": {}
      }
    },
    "HomeRegion": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Home Region for the license.</p>",
        "smithy.api#required": {}
      }
    }
  }
},
"Validity": {

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    "target": "com.amazonaws.licensemanager#DatetimeRange",
    "traits": {
      "smithy.api#documentation": "<p>Date and time range during which the license is valid, in ISO8601-
UTC format.</p>",
      "smithy.api#required": {}
    }
  },
  "Entitlements": {
    "target": "com.amazonaws.licensemanager#EntitlementList",
    "traits": {
      "smithy.api#documentation": "<p>License entitlements.</p>",
      "smithy.api#required": {}
    }
  },
  "Beneficiary": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>License beneficiary.</p>",
      "smithy.api#required": {}
    }
  },
  "ConsumptionConfiguration": {
    "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
    "traits": {
      "smithy.api#documentation": "<p>Configuration for consumption of the license. Choose a provisional
configuration for workloads\n      running with continuous connectivity. Choose a borrow configuration for
workloads with offline\n      usage.</p>",
      "smithy.api#required": {}
    }
  },
  "LicenseMetadata": {
    "target": "com.amazonaws.licensemanager#MetadataList",
    "traits": {
      "smithy.api#documentation": "<p>Information about the license.</p>"
    }
  },
  "ClientToken": {
    "target": "com.amazonaws.licensemanager#ClientToken",
    "traits": {
      "smithy.api#documentation":
      "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
      "smithy.api#required": {}
    }
  }
},
"traits": {
  "smithy.api#input": {}
}

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},
"com.amazonaws.licensemanager#CreateLicenseResponse": {
  "type": "structure",
  "members": {
    "LicenseArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
      }
    },
    "Status": {
      "target": "com.amazonaws.licensemanager#LicenseStatus",
      "traits": {
        "smithy.api#documentation": "<p>License status.</p>"
      }
    },
    "Version": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>License version.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#CreateLicenseVersion": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#CreateLicenseVersionRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#CreateLicenseVersionResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#ConflictException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    }
  ],

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    {
      "target": "com.amazonaws.licensemanager#RedirectException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Creates a new version of the specified license.</p>"
  }
},
"com.amazonaws.licensemanager#CreateLicenseVersionRequest": {
  "type": "structure",
  "members": {
    "LicenseArn": {
      "target":
"com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
        "smithy.api#required": {}
      }
    },
    "LicenseName": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>License name.</p>",
        "smithy.api#required": {}
      }
    },
    "ProductName": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Product name.</p>",
        "smithy.api#required": {}
      }
    },
    "Issuer": {
      "target": "com.amazonaws.licensemanager#Issuer",
      "traits": {
        "smithy.api#documentation": "<p>License issuer.</p>",
        "smithy.api#required": {}
      }
    }
  }
}

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    }
  },
  "HomeRegion": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Home Region of the license.</p>",
      "smithy.api#required": {}
    }
  },
  "Validity": {
    "target": "com.amazonaws.licensemanager#DatetimeRange",
    "traits": {
      "smithy.api#documentation": "<p>Date and time range during which the license is valid, in ISO8601-
UTC format.</p>",
      "smithy.api#required": {}
    }
  },
  "LicenseMetadata": {
    "target": "com.amazonaws.licensemanager#MetadataList",
    "traits": {
      "smithy.api#documentation": "<p>Information about the license.</p>"
    }
  },
  "Entitlements": {
    "target": "com.amazonaws.licensemanager#EntitlementList",
    "traits": {
      "smithy.api#documentation": "<p>License entitlements.</p>",
      "smithy.api#required": {}
    }
  },
  "ConsumptionConfiguration": {
    "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
    "traits": {
      "smithy.api#documentation": "<p>Configuration for consumption of the license. Choose a provisional
configuration for workloads\n      running with continuous connectivity. Choose a borrow configuration for
workloads with offline\n      usage.</p>",
      "smithy.api#required": {}
    }
  },
  "Status": {
    "target": "com.amazonaws.licensemanager#LicenseStatus",
    "traits": {
      "smithy.api#documentation": "<p>License status.</p>",
      "smithy.api#required": {}
    }
  },
  "ClientToken": {

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        "target": "com.amazonaws.licensemanager#ClientToken",
        "traits": {
            "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",
            "smithy.api#required": {}
        }
    },
    "SourceVersion": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
            "smithy.api#documentation": "<p>Current version of the license.</p>"
        }
    }
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseVersionResponse": {
    "type": "structure",
    "members": {
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>License ARN.</p>"
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>New version of the license.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#LicenseStatus",
            "traits": {
                "smithy.api#documentation": "<p>License status.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output":
    }
}
},
"com.amazonaws.licensemanager#CreateToken": {
    "type": "operation",

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"input": {
  "target": "com.amazonaws.licensemanager#CreateTokenRequest"
},
"output": {
  "target": "com.amazonaws.licensemanager#CreateTokenResponse"
},
"errors": [
  {
    "target": "com.amazonaws.licensemanager#AccessDeniedException"
  },
  {
    "target": "com.amazonaws.licensemanager#AuthorizationException"
  },
  {
    "target": "com.amazonaws.licensemanager#RateLimitExceededException"
  },
  {
    "target": "com.amazonaws.licensemanager#RedirectException"
  },
  {
    "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
  },
  {
    "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
  },
  {
    "target": "com.amazonaws.licensemanager#ServerInternalException"
  },
  {
    "target": "com.amazonaws.licensemanager#ValidationException"
  }
],
"traits": {
  "smithy.api#documentation": "<p>Creates a long-lived token.</p>\n      <p>A refresh token is a JWT token used to get an access token. With an access token,\n      you can call AssumeRoleWithWebIdentity to get role credentials that you can use to\n      call License Manager to manage the specified license.</p>"
}
},
"com.amazonaws.licensemanager#CreateTokenRequest": {
  "type": "structure",
  "members": {
    "LicenseArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license. The ARN is mapped to the aud claim of the\n      JWT token.</p>",

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    "smithy.api#required": {}
  },
  "RoleArns": {
    "target": "com.amazonaws.licensemanager#ArnList",
    "traits": {
      "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the IAM roles to embed in the
token. \n License Manager does not check whether the roles are in use.</p>"
    }
  },
  "ExpirationInDays": {
    "target": "com.amazonaws.licensemanager#Integer",
    "traits": {
      "smithy.api#documentation": "<p>Token expiration, in days, counted from token creation. The
default is 365 days.</p>"
    }
  },
  "TokenProperties": {
    "target": "com.amazonaws.licensemanager#MaxSize3StringList",
    "traits": {
      "smithy.api#documentation": "<p>Data specified by the caller to be included in the JWT token. The
data is mapped\n to the amr claim of the JWT token.</p>"
    }
  },
  "ClientToken": {
    "target": "com.amazonaws.licensemanager#ClientToken",
    "traits": {
      "smithy.api#documentation": "<p>Idempotency token, valid for 10 minutes.</p>",
      "smithy.api#required": {}
    }
  },
  "traits": {
    "smithy.api#input": {}
  },
  "com.amazonaws.licensemanager#CreateTokenResponse": {
    "type": "structure",
    "members": {
      "TokenId": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Token ID.</p>"
        }
      }
    }
  },
  "TokenType": {
    "target": "com.amazonaws.licensemanager#TokenType",

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    "traits": {
      "smithy.api#documentation": "<p>Token type.</p>"
    }
  },
  "Token": {
    "target": "com.amazonaws.licensemanager#TokenString",
    "traits": {
      "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>"
    }
  }
},
"traits": {
  "smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#DateTime": {
  "type": "timestamp"
},
"com.amazonaws.licensemanager#DatetimeRange": {
  "type": "structure",
  "members": {
    "Begin": {
      "target": "com.amazonaws.licensemanager#ISO8601DateTime",
      "traits": {
        "smithy.api#documentation": "<p>Start of the time range.</p>",
        "smithy.api#required": {}
      }
    },
    "End": {
      "target": "com.amazonaws.licensemanager#ISO8601DateTime",
      "traits": {
        "smithy.api#documentation": "<p>End of the time range.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Describes a time range, in ISO8601-UTC format.</p>"
  }
},
"com.amazonaws.licensemanager#DeleteGrant": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#DeleteGrantRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#DeleteGrantResponse"
  },
  "errors": [

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    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Deletes
the specified grant.</p>"
  }
},
"com.amazonaws.licensemanager#DeleteGrantRequest": {
  "type": "structure",
  "members": {
    "GrantArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
        "smithy.api#required": {}
      }
    },
    "StatusReason": {
      "target": "com.amazonaws.licensemanager#StatusReasonMessage",
      "traits": {
        "smithy.api#documentation": "<p>The Status reason for the delete request.</p>"
      }
    }
  },
  "Version": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Current version of the

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grant.</p>",
    "smithy.api#required": {}
  }
},
"traits": {
  "smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteGrantResponse": {
  "type": "structure",
  "members": {
    "GrantArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>Grant ARN.</p>"
      }
    },
    "Status": {
      "target": "com.amazonaws.licensemanager#GrantStatus",
      "traits": {
        "smithy.api#documentation": "<p>Grant status.</p>"
      }
    },
    "Version": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation":
"<p>Grant version.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#DeleteLicense": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#DeleteLicenseRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#DeleteLicenseResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    }
  ],

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    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#ConflictException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    }
  ],
  {
    "target": "com.amazonaws.licensemanager#RateLimitExceededException"
  },
  {
    "target": "com.amazonaws.licensemanager#RedirectException"
  },
  {
    "target": "com.amazonaws.licensemanager#ServerInternalException"
  },
  {
    "target": "com.amazonaws.licensemanager#ValidationException"
  }
],
"traits": {
  "smithy.api#documentation": "<p>Deletes the specified license.</p>"
}
},
"com.amazonaws.licensemanager#DeleteLicenseConfiguration": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse"
  },
}
"errors": [
  {
    "target": "com.amazonaws.licensemanager#AccessDeniedException"
  },
  {
    "target": "com.amazonaws.licensemanager#AuthorizationException"
  },
  {
    "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
  },
  {
    "target": "com.amazonaws.licensemanager#RateLimitExceededException"
  }
]

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    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Deletes the specified license configuration.</p>\n    <p>You cannot delete a license configuration that is in use.</p>"
  }
},
"com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest": {
  "type": "structure",
  "members":
{
  "LicenseConfigurationArn": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>ID of the license configuration.</p>",
      "smithy.api#required": {}
    }
  }
},
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse": {
  "type": "structure",
  "members": {},
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    }
  ],

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    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Deletes the specified report generator.</p>\n    <p>This action deletes the report generator, which stops it from generating future reports.\n    The action cannot be reversed. It has no effect on the previous reports from this generator.</p>"
  }
},
"com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest": {
  "type": "structure",
  "members": {
    "LicenseManagerReportGeneratorArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator to be deleted.</p>",
        "smithy.api#required": {}
      }
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse": {
  "type": "structure",
  "members": {},
  "traits": {
    "smithy.api#output": {}
  }
}

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    },
    "com.amazonaws.licensemanager#DeleteLicenseRequest": {
      "type": "structure",
      "members": {
        "LicenseArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
            "smithy.api#required": {}
          }
        },
        "SourceVersion": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Current version of the license.</p>",
            "smithy.api#required": {}
          }
        }
      }
    },
    "traits": {
      "smithy.api#input": {}
    }
  },
  "com.amazonaws.licensemanager#DeleteLicenseResponse": {
    "type": "structure",
    "members": {
      "Status": {
        "target": "com.amazonaws.licensemanager#LicenseDeletionStatus",
        "traits": {
          "smithy.api#documentation": "<p>License status.</p>"
        }
      },
      "DeletionDate": {
        "target": "com.amazonaws.licensemanager#ISO8601DateTime",
        "traits": {
          "smithy.api#documentation": "<p>Date when the license is deleted.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#DeleteToken": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#DeleteTokenRequest"
    }
  }
}

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    },
    "output": {
      "target": "com.amazonaws.licensemanager#DeleteTokenResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#RedirectException"
      },
      {
        "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
      },
      {
        "target": "com.amazonaws.licensemanager#ValidationException"
      }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Deletes the specified token. Must be called in the license home
Region.</p>"
    }
  },
  "com.amazonaws.licensemanager#DeleteTokenRequest": {
    "type": "structure",
    "members": {
      "TokenId": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Token ID.</p>",
          "smithy.api#required": {}
        }
      }
    },
    "traits": {
      "smithy.api#input": {}
    }
  },
},

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"com.amazonaws.licensemanager#DeleteTokenResponse": {
  "type": "structure",
  "members": {},
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#DigitalSignatureMethod": {
  "type": "enum",
  "members": {
    "JWT_PS384": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "JWT_PS384"
      }
    }
  }
},
"com.amazonaws.licensemanager#Entitlement": {
  "type": "structure",
  "members": {
    "Name": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Entitlement name.</p>",
        "smithy.api#required": {}
      }
    },
    "Value": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Entitlement resource. Use only
if the unit is None.</p>"
      }
    },
    "MaxCount": {
      "target": "com.amazonaws.licensemanager#Long",
      "traits": {
        "smithy.api#documentation": "<p>Maximum entitlement count. Use if the unit is not None.</p>"
      }
    },
    "Overage": {
      "target": "com.amazonaws.licensemanager#BoxBoolean",
      "traits": {
        "smithy.api#documentation": "<p>Indicates whether overages are allowed.</p>"
      }
    }
  }
},

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    "Unit": {
      "target": "com.amazonaws.licensemanager#EntitlementUnit",
      "traits": {
        "smithy.api#documentation": "<p>Entitlement unit.</p>",
        "smithy.api#required": {}
      }
    },
    "AllowCheckIn": {
      "target":
"com.amazonaws.licensemanager#BoxBoolean",
      "traits": {
        "smithy.api#documentation": "<p>Indicates whether check-ins are allowed.</p>"
      }
    },
    "traits": {
      "smithy.api#documentation": "<p>Describes a resource entitled for use with a license.</p>"
    }
  },
  "com.amazonaws.licensemanager#EntitlementData": {
    "type": "structure",
    "members": {
      "Name": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Entitlement data name.</p>",
          "smithy.api#required": {}
        }
      },
      "Value": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Entitlement
data value.</p>"
        }
      }
    },
    "Unit": {
      "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
      "traits": {
        "smithy.api#documentation": "<p>Entitlement data unit.</p>",
        "smithy.api#required": {}
      }
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Data associated with an entitlement resource.</p>"
  }
},

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"com.amazonaws.licensemanager#EntitlementDataList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#EntitlementData"
  }
},
"com.amazonaws.licensemanager#EntitlementDataUnit": {
  "type": "enum",
  "members": {
    "COUNT": {
      "target": "smithy.api#Unit",
      "traits": {
"smithy.api#enumValue": "Count"
      }
    },
    "NONE": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "None"
      }
    },
    "SECONDS": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Seconds"
      }
    },
    "MICROSECONDS": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Microseconds"
      }
    },
    "MILLISECONDS": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Milliseconds"
      }
    },
    "BYTES": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Bytes"
      }
    },
    "KILOBYTES": {
      "target": "smithy.api#Unit",

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    "traits": {
      "smithy.api#enumValue": "Kilobytes"
    }
  },
  "MEGABYTES": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Megabytes"
    }
  },
  "GIGABYTES": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Gigabytes"
    }
  },
  "TERABYTES": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Terabytes"
    }
  },
  "BITS":
  {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Bits"
    }
  },
  "KILOBITS": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Kilobits"
    }
  },
  "MEGABITS": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Megabits"
    }
  },
  "GIGABITS": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Gigabits"
    }
  },
  "TERABITS": {

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    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Terabits"
    }
  },
  "PERCENT": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Percent"
    }
  },
  "BYTES_PER_SECOND": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Bytes/Second"
    }
  },
  "KILOBYTES_PER_SECOND": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Kilobytes/Second"
    }
  },
  "MEGABYTES_PER_SECOND": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Megabytes/Second"
    }
  },
  "GIGABYTES_PER_SECOND": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Gigabytes/Second"
    }
  },
  "TERABYTES_PER_SECOND": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Terabytes/Second"
    }
  },
  "BITS_PER_SECOND": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Bits/Second"
    }
  },

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"KILOBITS_PER_SECOND": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Kilobits/Second"
  }
},
"MEGABITS_PER_SECOND": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue":
"Megabits/Second"
  }
},
"GIGABITS_PER_SECOND": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Gigabits/Second"
  }
},
"TERABITS_PER_SECOND": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Terabits/Second"
  }
},
"COUNT_PER_SECOND": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Count/Second"
  }
}
},
"com.amazonaws.licensemanager#EntitlementList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#Entitlement"
  }
},
"com.amazonaws.licensemanager#EntitlementNotAllowedException":
{
  "type": "structure",
  "members": {
    "Message": {
      "target": "com.amazonaws.licensemanager#Message"
    }
  },
  "traits": {

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    "smithy.api#documentation": "<p>The entitlement is not allowed.</p>",
    "smithy.api#error": "client",
    "smithy.api#httpError": 400
  }
},
"com.amazonaws.licensemanager#EntitlementUnit": {
  "type": "enum",
  "members": {
    "COUNT": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Count"
      }
    },
    "NONE": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "None"
      }
    },
    "SECONDS": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Seconds"
      }
    },
    "MICROSECONDS": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Microseconds"
      }
    },
    "MILLISECONDS": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Milliseconds"
      }
    },
    "BYTES": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Bytes"
      }
    },
    "KILOBYTES": {
      "target": "smithy.api#Unit",
      "traits": {

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        "smithy.api#enumValue": "Kilobytes"
    }
},
"MEGABYTES": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Megabytes"
    }
},
"GIGABYTES": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Gigabytes"
    }
},
"TERABYTES": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Terabytes"
    }
},
"BITS": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Bits"
    }
},
"KILOBITS": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Kilobits"
    }
},
"MEGABITS": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Megabits"
    }
},
"GIGABITS": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Gigabits"
    }
},
"TERABITS": {
    "target": "smithy.api#Unit",

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    "traits": {
      "smithy.api#enumValue": "Terabits"
    }
  },
  "PERCENT": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Percent"
    }
  },
  "BYTES_PER_SECOND": {
    "target":
"smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Bytes/Second"
    }
  },
  "KILOBYTES_PER_SECOND": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Kilobytes/Second"
    }
  },
  "MEGABYTES_PER_SECOND": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Megabytes/Second"
    }
  },
  "GIGABYTES_PER_SECOND": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Gigabytes/Second"
    }
  },
  "TERABYTES_PER_SECOND": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Terabytes/Second"
    }
  },
  "BITS_PER_SECOND": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Bits/Second"
    }
  },

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"KILOBITS_PER_SECOND": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Kilobits/Second"
  }
},
"MEGABITS_PER_SECOND": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Megabits/Second"
  }
},
"GIGABITS_PER_SECOND": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Gigabits/Second"
  }
},

"TERABITS_PER_SECOND": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Terabits/Second"
  }
},
"COUNT_PER_SECOND": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Count/Second"
  }
}
},
"com.amazonaws.licensemanager#EntitlementUsage": {
  "type": "structure",
  "members": {
    "Name": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Entitlement usage name.</p>",
        "smithy.api#required": {}
      }
    },
    "ConsumedValue": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Resource usage consumed.</p>",

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        "smithy.api#required": {}
    },
    "MaxCount": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
            "smithy.api#documentation": "<p>Maximum entitlement usage count.</p>"
        }
    },
    "Unit": {
        "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
        "traits": {
            "smithy.api#documentation": "<p>Entitlement usage unit.</p>",
            "smithy.api#required": {}
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Usage associated with an entitlement resource.</p>"
    },
    "com.amazonaws.licensemanager#EntitlementUsageList":
    {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#EntitlementUsage"
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumption": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            }
        ]
    }
}

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    },
    {
      "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Extends the expiration date for license consumption.</p>"
  }
},
"com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest": {
  "type": "structure",
  "members": {
    "LicenseConsumptionToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>License consumption token.</p>",
        "smithy.api#required": {}
      }
    }
  },
  "DryRun": {
    "target": "com.amazonaws.licensemanager#Boolean",
    "traits": {
      "smithy.api#default": false,
      "smithy.api#documentation": "<p>Checks whether you have the required permissions for the action, without actually making the request. Provides an error response if you do not have the required permissions.</p>"
    }
  }
},
"traits": {
  "smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse": {
  "type": "structure",
  "members": {
    "LicenseConsumptionToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>License consumption token.</p>"
      }
    }
  },

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    "Expiration": {
      "target": "com.amazonaws.licensemanager#ISO8601DateTime",
      "traits": {
        "smithy.api#documentation": "<p>Date and time at which the license consumption expires.</p>"
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#FailedDependencyException": {
    "type": "structure",
    "members": {
      "Message": {
        "target": "com.amazonaws.licensemanager#Message"
      },
      "ErrorCode": {
        "target": "com.amazonaws.licensemanager#String"
      }
    },
    "traits": {
      "aws.protocols#awsQueryError": {
        "code": "FailedDependency",
        "httpResponseCode": 424
      },
      "smithy.api#documentation":
        "<p>A dependency required to run the API is missing.</p>",
      "smithy.api#error": "client",
      "smithy.api#httpError": 424
    }
  },
  "com.amazonaws.licensemanager#Filter": {
    "type": "structure",
    "members": {
      "Name": {
        "target": "com.amazonaws.licensemanager#FilterName",
        "traits": {
          "smithy.api#documentation": "<p>Name of the filter. Filter names are case-sensitive.</p>"
        }
      },
      "Values": {
        "target": "com.amazonaws.licensemanager#FilterValues",
        "traits": {
          "smithy.api#documentation": "<p>The value of the filter, which is case-sensitive. You can only specify one value for the filter.</p>"
        }
      }
    }
  }
}

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```

    }
  },
  "traits": {
    "smithy.api#documentation": "<p>A filter
name and value pair that is used to return more specific results from a\n    describe operation. Filters can be used
to match a set of resources by specific criteria,\n    such as tags, attributes, or IDs.</p>"
  }
},
"com.amazonaws.licensemanager#FilterLimitExceededException": {
  "type": "structure",
  "members": {
    "Message": {
      "target": "com.amazonaws.licensemanager#Message"
    }
  },
  "traits": {
    "aws.protocols#awsQueryError": {
      "code": "FilterLimitExceeded",
      "httpResponseCode": 400
    },
    "smithy.api#documentation": "<p>The request uses too many filters or too many filter values.</p>",
    "smithy.api#error": "client",
    "smithy.api#httpError": 400
  }
},
"com.amazonaws.licensemanager#FilterList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#Filter"
  }
},
"com.amazonaws.licensemanager#FilterName": {
  "type": "string"
},
"com.amazonaws.licensemanager#FilterValue": {
  "type": "string"
},
"com.amazonaws.licensemanager#FilterValues": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#FilterValue",
    "traits": {
      "smithy.api#xmlName": "item"
    }
  }
},
"com.amazonaws.licensemanager#Filters": {
  "type": "list",

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"member": {
  "target": "com.amazonaws.licensemanager#Filter",
  "traits": {
    "smithy.api#xmlName": "item"
  }
},
"com.amazonaws.licensemanager#GetAccessToken": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#GetAccessTokenRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#GetAccessTokenResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Gets a temporary access token to use with  
AssumeRoleWithWebIdentity. Access  
tokens\n    are valid for one hour.</p>"
  }
},
"com.amazonaws.licensemanager#GetAccessTokenRequest": {
  "type": "structure",
  "members": {
    "Token": {
      "target": "com.amazonaws.licensemanager#TokenString",
      "traits": {
        "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>",
        "smithy.api#required": {}
      }
    }
  },

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    "TokenProperties": {
      "target": "com.amazonaws.licensemanager#MaxSize3StringList",
      "traits": {
        "smithy.api#documentation": "<p>Token properties to validate against those present in the JWT
token.</p>"
      }
    },
    "traits": {
      "smithy.api#input": {}
    }
  },
  "com.amazonaws.licensemanager#GetAccessTokenResponse":
{
  "type": "structure",
  "members": {
    "AccessToken": {
      "target": "com.amazonaws.licensemanager#TokenString",
      "traits": {
        "smithy.api#documentation": "<p>Temporary access token.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#GetGrant": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#GetGrantRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#GetGrantResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    }
  ],
  {
    "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
  },
  {
    "target": "com.amazonaws.licensemanager#RateLimitExceededException"
  }
}

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    },
    {
      "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Gets detailed information about the specified grant.</p>"
  }
},
"com.amazonaws.licensemanager#GetGrantRequest": {
  "type": "structure",
  "members": {
    "GrantArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
        "smithy.api#required": {}
      }
    },
    "Version": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Grant version.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#GetGrantResponse": {
  "type": "structure",
  "members": {
    "Grant": {
      "target": "com.amazonaws.licensemanager#Grant",
      "traits": {
        "smithy.api#documentation": "<p>Grant details.</p>"
      }
    }
  },
  "traits": {

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"smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#GetLicense": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#GetLicenseRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#GetLicenseResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    }
  ],
  {
    "target": "com.amazonaws.licensemanager#ValidationException"
  }
],
"traits": {
  "smithy.api#documentation": "<p>Gets detailed information about the specified license.</p>"
}
},
"com.amazonaws.licensemanager#GetLicenseConfiguration": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#GetLicenseConfigurationRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#GetLicenseConfigurationResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
  ],

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```

    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Gets detailed information about the specified license configuration.</p>"
  }
},
"com.amazonaws.licensemanager#GetLicenseConfigurationRequest": {
  "type": "structure",
  "members": {
    "LicenseConfigurationArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>",
        "smithy.api#required": {}
      }
    }
  },
  "traits":
{
  "smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseConfigurationResponse": {
  "type": "structure",
  "members": {
    "LicenseConfigurationId": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Unique ID for the license configuration.</p>"
      }
    },
    "LicenseConfigurationArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
      }
    }
  }
}

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```

    }
  },
  "Name": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Name of the license configuration.</p>"
    }
  },
  "Description": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Description of the license configuration.</p>"
    }
  },
  "LicenseCountingType": {
    "target": "com.amazonaws.licensemanager#LicenseCountingType",
    "traits": {
      "smithy.api#documentation": "<p>Dimension for which the licenses are counted.</p>"
    }
  },
  "LicenseRules": {
    "target": "com.amazonaws.licensemanager#StringList",
    "traits": {
      "smithy.api#documentation": "<p>License rules.</p>"
    }
  },
  "LicenseCount": {
    "target": "com.amazonaws.licensemanager#BoxLong",

    "traits": {
      "smithy.api#documentation": "<p>Number of available licenses.</p>"
    }
  },
  "LicenseCountHardLimit": {
    "target": "com.amazonaws.licensemanager#BoxBoolean",
    "traits": {
      "smithy.api#documentation": "<p>Sets the number of available licenses as a hard limit.</p>"
    }
  },
  "ConsumedLicenses": {
    "target": "com.amazonaws.licensemanager#BoxLong",
    "traits": {
      "smithy.api#documentation": "<p>Number of licenses assigned to resources.</p>"
    }
  },
  "Status": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {

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    "smithy.api#documentation": "<p>License configuration status.</p>"
  }
},
"OwnerAccountId": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Account ID of the owner of the license configuration.</p>"
  }
},
"ConsumedLicenseSummaryList": {
  "target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
  "traits": {
    "smithy.api#documentation": "<p>Summaries of the licenses consumed by resources.</p>"
  }
},
"ManagedResourceSummaryList": {
  "target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
  "traits": {
    "smithy.api#documentation": "<p>Summaries of the managed resources.</p>"
  }
},
"Tags": {
  "target": "com.amazonaws.licensemanager#TagList",
  "traits": {
    "smithy.api#documentation": "<p>Tags for the license configuration.</p>"
  }
},
"ProductInformationList": {
  "target": "com.amazonaws.licensemanager#ProductInformationList",
  "traits": {
    "smithy.api#documentation": "<p>Product information.</p>"
  }
},
"AutomatedDiscoveryInformation": {
  "target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
  "traits": {
    "smithy.api#documentation": "<p>Automated discovery information.</p>"
  }
},
"DisassociateWhenNotFound": {
  "target": "com.amazonaws.licensemanager#BoxBoolean",
  "traits": {
    "smithy.api#documentation": "<p>When
true, disassociates a resource when software is uninstalled.</p>"
  }
}
},

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    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#GetLicenseConversionTask": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#GetLicenseConversionTaskRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
      }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Gets information about the specified license type conversion task.</p>"
    }
  },
  "com.amazonaws.licensemanager#GetLicenseConversionTaskRequest": {
    "type": "structure",
    "members": {
      "LicenseConversionTaskId": {
        "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
        "traits": {
          "smithy.api#documentation": "<p>ID of the license type conversion task to retrieve information on.</p>",
          "smithy.api#required": {}
        }
      }
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
}

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    }
  },
  "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse": {
    "type": "structure",
    "members": {
      "LicenseConversionTaskId": {
        "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
        "traits": {
          "smithy.api#documentation": "<p>ID of the license type conversion task.</p>"
        }
      },
      "ResourceArn": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the resources the license
conversion task is associated with.</p>"
        }
      },
      "SourceLicenseContext": {
        "target": "com.amazonaws.licensemanager#LicenseConversionContext",
        "traits": {
          "smithy.api#documentation": "<p>Information
about the license type converted from.</p>"
        }
      },
      "DestinationLicenseContext": {
        "target": "com.amazonaws.licensemanager#LicenseConversionContext",
        "traits": {
          "smithy.api#documentation": "<p>Information about the license type converted to.</p>"
        }
      },
      "StatusMessage": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>The status message for the conversion task.</p>"
        }
      },
      "Status": {
        "target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
        "traits": {
          "smithy.api#documentation": "<p>Status of the license type conversion task.</p>"
        }
      }
    },
    "StartTime": {
      "target": "com.amazonaws.licensemanager#DateTime",
      "traits": {
        "smithy.api#documentation": "<p>Time at which the license type conversion task was started .</p>"
      }
    }
  }
}

```

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    }
  },
  "LicenseConversionTime": {
    "target": "com.amazonaws.licensemanager#DateTime",
    "traits": {
      "smithy.api#documentation": "<p>Amount of time to complete the license type conversion.</p>"
    }
  },
  "EndTime": {
    "target": "com.amazonaws.licensemanager#DateTime",
    "traits": {
      "smithy.api#documentation": "<p>Time at which the license type conversion task was
completed.</p>"
    }
  },
  "traits": {
    "smithy.api#output": {}
  },
  "com.amazonaws.licensemanager#GetLicenseManagerReportGenerator":
{
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
    }
  ]
}

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    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Gets information about the specified report generator.</p>"
  }
},
"com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest": {
  "type": "structure",
  "members": {
    "LicenseManagerReportGeneratorArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator.</p>",
        "smithy.api#required":
      }
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse": {
  "type": "structure",
  "members": {
    "ReportGenerator": {
      "target": "com.amazonaws.licensemanager#ReportGenerator",
      "traits": {
        "smithy.api#documentation": "<p>A report generator that creates periodic reports about your license configurations.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#GetLicenseRequest": {
  "type": "structure",
  "members": {
    "LicenseArn": {
      "target": "com.amazonaws.licensemanager#Arn",

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    "traits": {
"smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
      "smithy.api#required": {}
    },
    "Version": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>License version.</p>"
      }
    },
    "traits": {
      "smithy.api#input": {}
    },
  },
  "com.amazonaws.licensemanager#GetLicenseResponse": {
    "type": "structure",
    "members": {
      "License": {
        "target": "com.amazonaws.licensemanager#License",
        "traits": {
          "smithy.api#documentation": "<p>License details.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    },
  },
  "com.amazonaws.licensemanager#GetLicenseUsage": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#GetLicenseUsageRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#GetLicenseUsageResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {

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        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {

"target": "com.amazonaws.licensemanager#ValidationException"
    }
],
"traits": {
    "smithy.api#documentation": "<p>Gets detailed information about the usage of the specified license.</p>"
}
},
"com.amazonaws.licensemanager#GetLicenseUsageRequest": {
    "type": "structure",
    "members": {
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#GetLicenseUsageResponse": {
    "type": "structure",
    "members": {
        "LicenseUsage": {
            "target":
"com.amazonaws.licensemanager#LicenseUsage",
            "traits": {
                "smithy.api#documentation": "<p>License usage details.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#GetServiceSettings": {

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"type": "operation",
"input": {
  "target": "com.amazonaws.licensemanager#GetServiceSettingsRequest"
},
"output": {
  "target": "com.amazonaws.licensemanager#GetServiceSettingsResponse"
},
"errors": [
  {
    "target": "com.amazonaws.licensemanager#AccessDeniedException"
  },
  {
    "target": "com.amazonaws.licensemanager#AuthorizationException"
  },
  {
    "target": "com.amazonaws.licensemanager#RateLimitExceededException"
  },
  {
    "target": "com.amazonaws.licensemanager#ServerInternalException"
  }
],
"traits": {
  "smithy.api#documentation": "<p>Gets the License Manager settings for the current Region.</p>"
}
},
"com.amazonaws.licensemanager#GetServiceSettingsRequest": {
  "type": "structure",
  "members": {},
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#GetServiceSettingsResponse": {
  "type": "structure",
  "members": {
    "S3BucketArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Regional S3 bucket path for storing reports, license trail event data,
discovery data,\n    and so on.</p>"
      }
    }
  },
  "SnsTopicArn": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>SNS topic configured to receive notifications from License
Manager.</p>"
    }
  }
}

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    }
  },
  "OrganizationConfiguration": {
    "target": "com.amazonaws.licensemanager#OrganizationConfiguration",
    "traits": {
      "smithy.api#documentation": "<p>Indicates whether Organizations is integrated with License
Manager for\n      cross-account discovery.</p>"
    }
  },
  "EnableCrossAccountsDiscovery": {
    "target": "com.amazonaws.licensemanager#BoxBoolean",
    "traits": {
      "smithy.api#documentation": "<p>Indicates whether cross-account discovery is enabled.</p>"
    }
  },
},
"LicenseManagerResourceShareArn": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource share. The License
Manager management account \n      provides member accounts with access to this share.</p>"
  }
},
"traits": {
  "smithy.api#output": {}
},
},
"com.amazonaws.licensemanager#Grant": {
  "type": "structure",
  "members": {
    "GrantArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
        "smithy.api#required": {}
      }
    }
  },
},
"GrantName": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Grant name.</p>",
    "smithy.api#required": {}
  }
},
"ParentArn": {
  "target": "com.amazonaws.licensemanager#Arn",

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    "traits": {
      "smithy.api#documentation": "<p>Parent ARN.</p>",
      "smithy.api#required": {}
    }
  },
  "LicenseArn": {
    "target": "com.amazonaws.licensemanager#Arn",
    "traits": {
      "smithy.api#documentation": "<p>License ARN.</p>",
      "smithy.api#required": {}
    }
  },
  "GranteePrincipalArn": {
    "target": "com.amazonaws.licensemanager#Arn",
    "traits": {

"smithy.api#documentation": "<p>The grantee principal ARN.</p>",
      "smithy.api#required": {}
    }
  },
  "HomeRegion": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Home Region of the grant.</p>",
      "smithy.api#required": {}
    }
  },
  "GrantStatus": {
    "target": "com.amazonaws.licensemanager#GrantStatus",
    "traits": {
      "smithy.api#documentation": "<p>Grant status.</p>",
      "smithy.api#required": {}
    }
  },
  "StatusReason": {
    "target": "com.amazonaws.licensemanager#StatusReasonMessage",
    "traits": {
      "smithy.api#documentation": "<p>Grant status reason.</p>"
    }
  },
  "Version": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Grant version.</p>",
      "smithy.api#required": {}
    }
  },
  "GrantedOperations": {

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    "target": "com.amazonaws.licensemanager#AllowedOperationList",
    "traits": {
      "smithy.api#documentation": "<p>Granted operations.</p>",
      "smithy.api#required": {}
    }
  },
  "Options": {
    "target": "com.amazonaws.licensemanager#Options",
    "traits": {
      "smithy.api#documentation": "<p>The options specified for the grant.</p>"
    }
  }
},
"traits": {
  "smithy.api#documentation":
"<p>Describes a grant.</p>"
}
},
"com.amazonaws.licensemanager#GrantList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#Grant"
  }
},
"com.amazonaws.licensemanager#GrantStatus": {
  "type": "enum",
  "members": {
    "PENDING_WORKFLOW": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "PENDING_WORKFLOW"
      }
    },
    "PENDING_ACCEPT": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "PENDING_ACCEPT"
      }
    },
    "REJECTED": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "REJECTED"
      }
    }
  }
},
"ACTIVE": {
  "target": "smithy.api#Unit",

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    "traits": {
      "smithy.api#enumValue": "ACTIVE"
    }
  },
  "FAILED_WORKFLOW": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "FAILED_WORKFLOW"
    }
  },
  "DELETED": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "DELETED"
    }
  },
  "PENDING_DELETE": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "PENDING_DELETE"
    }
  },
  "DISABLED": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "DISABLED"
    }
  },
  "WORKFLOW_COMPLETED": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "WORKFLOW_COMPLETED"
    }
  }
},
"com.amazonaws.licensemanager#GrantedLicense": {
  "type": "structure",
  "members": {
    "LicenseArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
      }
    },
    "LicenseName": {
      "target": "com.amazonaws.licensemanager#String",

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    "traits": {
      "smithy.api#documentation": "<p>License name.</p>"
    }
  },
  "ProductName": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Product name.</p>"
    }
  },
  "ProductSKU": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Product SKU.</p>"
    }
  },
  "Issuer": {
    "target": "com.amazonaws.licensemanager#IssuerDetails",
    "traits": {
      "smithy.api#documentation": "<p>Granted license issuer.</p>"
    }
  },
  "HomeRegion": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Home Region of the granted license.</p>"
    }
  },
  "Status": {
    "target": "com.amazonaws.licensemanager#LicenseStatus",
    "traits": {
      "smithy.api#documentation": "<p>Granted license status.</p>"
    }
  },
  "Validity": {
    "target": "com.amazonaws.licensemanager#DatetimeRange",
    "traits": {
      "smithy.api#documentation": "<p>Date and time range during which the granted license is valid, in ISO8601-UTC format.</p>"
    }
  },
  "Beneficiary": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Granted license beneficiary.</p>"
    }
  }
}

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    },
    "Entitlements": {
      "target": "com.amazonaws.licensemanager#EntitlementList",
      "traits": {
        "smithy.api#documentation": "<p>License entitlements.</p>"
      }
    },
    "ConsumptionConfiguration": {
      "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
      "traits": {
        "smithy.api#documentation": "<p>Configuration for consumption of the license.</p>"
      }
    },
    "LicenseMetadata": {
      "target": "com.amazonaws.licensemanager#MetadataList",
      "traits": {
        "smithy.api#documentation": "<p>Granted license metadata.</p>"
      }
    },
    "CreateTime": {
      "target": "com.amazonaws.licensemanager#ISO8601DateTime",
      "traits": {
        "smithy.api#documentation": "<p>Creation time of the granted license.</p>"
      }
    }
  }
},
"Version": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Version of the granted license.</p>"
  }
},
"ReceivedMetadata": {
  "target": "com.amazonaws.licensemanager#ReceivedMetadata",
  "traits": {
    "smithy.api#documentation": "<p>Granted license received metadata.</p>"
  }
}
},
"traits": {
  "smithy.api#documentation": "<p>Describes a license that is granted to a grantee.</p>"
}
},
"com.amazonaws.licensemanager#GrantedLicenseList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#GrantedLicense"
  }
}

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    },
    "com.amazonaws.licensemanager#ISO8601DateTime":
    {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#pattern": "^(-?(?:[1-9][0-9]*)?[0-9]{4})-(1[0-2]|0[1-9])-(3[0-1]|0[1-9]|[1-2][0-9])T(2[0-3]|[0-1][0-9]):([0-5][0-9]):([0-5][0-9])(\\.([0-9]+)?(?:Z|[-+](?:2[ 0-3]|[0-1][0-9]):[0-5][0-9])+)?"
        }
    },
    "com.amazonaws.licensemanager#Integer": {
        "type": "integer"
    },
    "com.amazonaws.licensemanager#InvalidParameterValueException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "InvalidParameterValueProvided",
                "httpResponseCode": 400
            },
            "smithy.api#documentation":
            "<p>One or more parameter values are not valid.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#InvalidResourceStateException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "InvalidResourceState",
                "httpResponseCode": 400
            },
            "smithy.api#documentation": "<p>License Manager cannot allocate a license to a resource because of its state.</p>\n    <p>For example, you cannot allocate a license to an instance in the process of shutting\n

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down.</p>",
  "smithy.api#error": "client",
  "smithy.api#httpError": 400
}
},

"com.amazonaws.licensemanager#InventoryFilter": {
  "type": "structure",
  "members": {
    "Name": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Name of the filter.</p>",
        "smithy.api#required": {}
      }
    },
    "Condition": {
      "target": "com.amazonaws.licensemanager#InventoryFilterCondition",
      "traits": {
        "smithy.api#documentation": "<p>Condition of the filter.</p>",
        "smithy.api#required": {}
      }
    },
    "Value": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Value of the filter.</p>"
      }
    }
  }
},

"traits": {
  "smithy.api#documentation": "<p>An inventory filter.</p>"
}
},

"com.amazonaws.licensemanager#InventoryFilterCondition": {
  "type": "enum",
  "members": {
    "EQUALS": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "EQUALS"
      }
    },
    "NOT_EQUALS": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "NOT_EQUALS"
      }
    }
  }
}

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    }
  },
  "BEGINS_WITH": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "BEGINS_WITH"
    }
  },
  "CONTAINS": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "CONTAINS"
    }
  }
}
},
"com.amazonaws.licensemanager#InventoryFilterList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#InventoryFilter"
  }
},
"com.amazonaws.licensemanager#Issuer": {
  "type": "structure",
  "members": {
    "Name": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Issuer name.</p>",
        "smithy.api#required": {}
      }
    },
    "SignKey": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Asymmetric KMS key from Key Management Service. The KMS
key must have a key usage
of sign and verify, \n      and support the RSASSA-PSS SHA-256 signing algorithm.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Details about the issuer of a license.</p>"
  }
},
"com.amazonaws.licensemanager#IssuerDetails": {
  "type": "structure",
  "members": {

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    "Name": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Issuer name.</p>"
      }
    },
    "SignKey": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Asymmetric KMS key from Key Management Service. The KMS
key must have a key usage of sign and verify, \n      and support the RSASSA-PSS SHA-256 signing
algorithm.</p>"
      }
    },
    "KeyFingerprint": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Issuer key fingerprint.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Details associated with the issuer of a license.</p>"
  }
},
"com.amazonaws.licensemanager#License": {
  "type": "structure",
  "members": {
    "LicenseArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
      }
    },
    "LicenseName": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>License name.</p>"
      }
    },
    "ProductName": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Product name.</p>"
      }
    },
    "ProductSKU": {

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    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Product SKU.</p>"
    }
  },
  "Issuer": {
    "target": "com.amazonaws.licensemanager#IssuerDetails",
    "traits": {
      "smithy.api#documentation": "<p>License issuer.</p>"
    }
  },
  "HomeRegion": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Home Region of the license.</p>"
    }
  },
  "Status": {
    "target": "com.amazonaws.licensemanager#LicenseStatus",
    "traits": {
      "smithy.api#documentation": "<p>License status.</p>"
    }
  },
  "Validity": {
    "target": "com.amazonaws.licensemanager#DatetimeRange",
    "traits": {
      "smithy.api#documentation": "<p>Date and time range during which the license is valid, in ISO8601-
UTC format.</p>"
    }
  },
  "Beneficiary": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>License beneficiary.</p>"
    }
  },
  "Entitlements": {
    "target": "com.amazonaws.licensemanager#EntitlementList",
    "traits": {
      "smithy.api#documentation": "<p>License entitlements.</p>"
    }
  },
  "ConsumptionConfiguration": {
    "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
    "traits": {
      "smithy.api#documentation": "<p>Configuration for consumption of the license.</p>"
    }
  }
}

```

```

    }
  },
  "LicenseMetadata": {
    "target": "com.amazonaws.licensemanager#MetadataList",
    "traits": {
      "smithy.api#documentation": "<p>License metadata.</p>"
    }
  },
  "CreateTime": {
    "target": "com.amazonaws.licensemanager#ISO8601DateTime",
    "traits": {
      "smithy.api#documentation": "<p>License
creation time.</p>"
    }
  },
  "Version": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>License version.</p>"
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Software license that is managed in License Manager.</p>"
  }
},
"com.amazonaws.licensemanager#LicenseConfiguration": {
  "type": "structure",
  "members": {
    "LicenseConfigurationId": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Unique ID of the license configuration.</p>"
      }
    },
    "LicenseConfigurationArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
      }
    },
    "Name": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Name of the license configuration.</p>"
      }
    },
    "Description": {

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    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Description of the license configuration.</p>"
    }
  },
  "LicenseCountingType": {
    "target": "com.amazonaws.licensemanager#LicenseCountingType",
    "traits": {
      "smithy.api#documentation": "<p>Dimension to use to track the license inventory.</p>"
    }
  },
  "LicenseRules": {
    "target": "com.amazonaws.licensemanager#StringList",
    "traits": {
      "smithy.api#documentation": "<p>License rules.</p>"
    }
  },
  "LicenseCount": {
    "target": "com.amazonaws.licensemanager#BoxLong",
    "traits": {
      "smithy.api#documentation": "<p>Number of licenses managed by the license configuration.</p>"
    }
  },
  "LicenseCountHardLimit": {
    "target": "com.amazonaws.licensemanager#BoxBoolean",
    "traits": {
      "smithy.api#documentation": "<p>Number of available licenses as a hard limit.</p>"
    }
  },
  "DisassociateWhenNotFound": {
    "target": "com.amazonaws.licensemanager#BoxBoolean",
    "traits": {
      "smithy.api#documentation": "<p>When true, disassociates a resource when software is
uninstalled.</p>"
    }
  },
  "ConsumedLicenses": {
    "target": "com.amazonaws.licensemanager#BoxLong",
    "traits": {
      "smithy.api#documentation": "<p>Number of licenses consumed. </p>"
    }
  },
  "Status": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Status of the license configuration.</p>"
    }
  },

```



```

"OwnerAccountId": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Account ID of the license configuration's owner.</p>"
  }
},
"ConsumedLicenseSummaryList": {
  "target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
  "traits": {
    "smithy.api#documentation": "<p>Summaries for licenses consumed by various resources.</p>"
  }
},
"ManagedResourceSummaryList": {
  "target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
  "traits": {
    "smithy.api#documentation": "<p>Summaries for managed resources.</p>"
  }
},
"ProductInformationList": {
  "target": "com.amazonaws.licensemanager#ProductInformationList",
  "traits": {
    "smithy.api#documentation": "<p>Product information.</p>"
  }
},
"AutomatedDiscoveryInformation": {
  "target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
  "traits": {
    "smithy.api#documentation": "<p>Automated discovery information.</p>"
  }
},
"traits": {
  "smithy.api#documentation": "<p>A license configuration is an abstraction of a customer license agreement that can be consumed and enforced by License Manager. Components include specifications for the license type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n Dedicated Instance, Dedicated Host, or all of these), host affinity (how long a VM\n must be associated with a host), and the number of licenses purchased and used.</p>"
}
},
"com.amazonaws.licensemanager#LicenseConfigurationAssociation": {
  "type": "structure",
  "members": {
    "ResourceArn":
  {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {

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        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
    }
},
"ResourceType": {
    "target": "com.amazonaws.licensemanager#ResourceType",
    "traits": {
        "smithy.api#documentation": "<p>Type of server resource.</p>"
    }
},
"ResourceOwnerId": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
        "smithy.api#documentation": "<p>ID of the Amazon Web Services account that owns the resource
consuming licenses.</p>"
    }
},
"AssociationTime": {
    "target": "com.amazonaws.licensemanager#DateTime",
    "traits": {
        "smithy.api#documentation": "<p>Time when the license configuration was associated with the resource.</p>"
    }
},
"AmiAssociationScope": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
        "smithy.api#documentation": "<p>Scope of AMI associations. The possible value is <code>cross-
account</code>.</p>"
    }
},
"traits": {
    "smithy.api#documentation": "<p>Describes an association with a license configuration.</p>"
}
},
"com.amazonaws.licensemanager#LicenseConfigurationAssociations": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#LicenseConfigurationAssociation"
    }
},
"com.amazonaws.licensemanager#LicenseConfigurationStatus": {
    "type": "enum",
    "members":
{
    "AVAILABLE": {
        "target": "smithy.api#Unit",
        "traits": {

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        "smithy.api#enumValue": "AVAILABLE"
    }
},
"DISABLED": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "DISABLED"
    }
}
},
"com.amazonaws.licensemanager#LicenseConfigurationUsage": {
    "type": "structure",
    "members": {
        "ResourceArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
            }
        },
        "ResourceType": {
            "target": "com.amazonaws.licensemanager#ResourceType",
            "traits": {
                "smithy.api#documentation": "<p>Type of resource.</p>"
            }
        },
        "ResourceStatus": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Status of the resource.</p>"
            }
        },
        "ResourceOwnerId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>ID of the account that owns the resource.</p>"
            }
        },
        "AssociationTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Time when the license configuration was initially associated with the resource.</p>"
            }
        }
    }
},

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"ConsumedLicenses": {
  "target": "com.amazonaws.licensemanager#BoxLong",
  "traits": {
    "smithy.api#documentation": "<p>Number of licenses consumed by the resource.</p>"
  }
},
"traits": {
  "smithy.api#documentation": "<p>Details about the usage of a resource associated with a license configuration.</p>"
},
"com.amazonaws.licensemanager#LicenseConfigurationUsageList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#LicenseConfigurationUsage"
  }
},
"com.amazonaws.licensemanager#LicenseConfigurations": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#LicenseConfiguration"
  }
},
"com.amazonaws.licensemanager#LicenseConversionContext": {
  "type": "structure",
  "members": {
    "UsageOperation": {
      "target": "com.amazonaws.licensemanager#UsageOperation",
      "traits": {
        "smithy.api#documentation": "<p>The Usage operation value that corresponds to the license type you are converting your resource from. For more information about which platforms correspond to which usage operation values see <a href='\"https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/billing-info-fields.html#billing-info\">Sample data: usage operation by platform</a>\n  </p>"
      }
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Information about a license type conversion task.</p>"
  }
},
"com.amazonaws.licensemanager#LicenseConversionTask": {
  "type": "structure",
  "members": {
    "LicenseConversionTaskId": {

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"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
  "traits": {
    "smithy.api#documentation": "<p>The ID of the license type conversion task.</p>"
  }
},
"ResourceArn": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource associated
with the license type\n      conversion task.</p>"
  }
},
"SourceLicenseContext": {
  "target": "com.amazonaws.licensemanager#LicenseConversionContext",
  "traits": {
    "smithy.api#documentation": "<p>Information about the license type this conversion task converted
from.</p>"
  }
},
"DestinationLicenseContext": {
  "target":
"com.amazonaws.licensemanager#LicenseConversionContext",
  "traits": {
    "smithy.api#documentation": "<p>Information about the license type this conversion task converted
to.</p>"
  }
},
"Status": {
  "target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
  "traits": {
    "smithy.api#documentation": "<p>The status of the conversion task.</p>"
  }
},
"StatusMessage": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>The status message for the conversion task.</p>"
  }
},
"StartTime": {
  "target": "com.amazonaws.licensemanager#DateTime",
  "traits": {
    "smithy.api#documentation":
"<p>The time the conversion task was started at.</p>"
  }
},
"LicenseConversionTime": {
  "target": "com.amazonaws.licensemanager#DateTime",

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    "traits": {
      "smithy.api#documentation": "<p>The time the usage operation value of the resource was
changed.</p>"
    }
  },
  "EndTime": {
    "target": "com.amazonaws.licensemanager#DateTime",
    "traits": {
      "smithy.api#documentation": "<p>The time the conversion task was completed.</p>"
    }
  }
},
"traits": {
  "smithy.api#documentation": "<p>Information about a license type conversion task.</p>"
}
},
"com.amazonaws.licensemanager#LicenseConversionTaskId": {
  "type": "string",
  "traits": {

    "smithy.api#length": {
      "min": 0,
      "max": 50
    },
    "smithy.api#pattern": "^\\ct-[a-zA-Z0-9]*$"
  }
},
"com.amazonaws.licensemanager#LicenseConversionTaskStatus": {
  "type": "enum",
  "members": {
    "IN_PROGRESS": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "IN_PROGRESS"
      }
    },
    "SUCCEEDED": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "SUCCEEDED"
      }
    },
    "FAILED": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "FAILED"
      }
    }
  }
}

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```

    }
  },
  "com.amazonaws.licensemanager#LicenseConversionTasks":
  {
    "type": "list",
    "member": {
      "target": "com.amazonaws.licensemanager#LicenseConversionTask"
    }
  },
  "com.amazonaws.licensemanager#LicenseCountingType": {
    "type": "enum",
    "members": {
      "VCPU": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "vCPU"
        }
      },
      "INSTANCE": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "Instance"
        }
      },
      "CORE": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "Core"
        }
      },
      "SOCKET": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "Socket"
        }
      }
    }
  },
  "com.amazonaws.licensemanager#LicenseDeletionStatus": {
    "type": "enum",
    "members": {
      "PENDING_DELETE": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "PENDING_DELETE"
        }
      },
      "DELETED": {

```

```

        "target": "smithy.api#Unit",
        "traits": {
            "smithy.api#enumValue": "DELETED"
        }
    },
    "com.amazonaws.licensemanager#LicenseList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#License"
        }
    },
    "com.amazonaws.licensemanager#LicenseOperationFailure": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
                }
            },
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits": {
                    "smithy.api#documentation": "<p>Resource type.</p>"
                }
            },
            "ErrorMessage": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Error message.</p>"
                }
            },
            "FailureTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Failure time.</p>"
                }
            },
            "OperationName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the operation.</p>"
                }
            }
        }
    },

```



```

    "ResourceOwnerId": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>ID of the Amazon Web Services account that owns the
resource.</p>"
      }
    },
    "OperationRequestedBy": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>The requester is \"License Manager Automated Discovery\".</p>"
      }
    },
    "MetadataList": {
      "target": "com.amazonaws.licensemanager#MetadataList",
      "traits": {
        "smithy.api#documentation": "<p>Reserved.</p>"
      }
    },
    "traits": {
      "smithy.api#documentation": "<p>Describes the failure of a license operation.</p>"
    }
  },
  "com.amazonaws.licensemanager#LicenseOperationFailureList": {
    "type": "list",
    "member": {
      "target": "com.amazonaws.licensemanager#LicenseOperationFailure"
    }
  },
  "com.amazonaws.licensemanager#LicenseSpecification": {
    "type": "structure",
    "members": {
      "LicenseConfigurationArn": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",

          "smithy.api#required": {}
        }
      },
      "AmiAssociationScope": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Scope of AMI associations. The possible value is <code>cross-
account</code>.</p>"
        }
      }
    }
  }
}

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```

    }
  }
},
"traits": {
  "smithy.api#documentation": "<p>Details for associating a license configuration with a resource.</p>"
}
},
"com.amazonaws.licensemanager#LicenseSpecifications": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#LicenseSpecification"
  }
},
"com.amazonaws.licensemanager#LicenseStatus": {
  "type": "enum",
  "members": {
    "AVAILABLE": {
      "target": "smithy.api#Unit",

      "traits": {
        "smithy.api#enumValue": "AVAILABLE"
      }
    },
    "PENDING_AVAILABLE": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "PENDING_AVAILABLE"
      }
    },
    "DEACTIVATED": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "DEACTIVATED"
      }
    },
    "SUSPENDED": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "SUSPENDED"
      }
    },
    "EXPIRED": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "EXPIRED"
      }
    }
  }
},

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"PENDING_DELETE": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "PENDING_DELETE"
  }
},
"DELETED": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "DELETED"
  }
}
},
"com.amazonaws.licensemanager#LicenseUsage": {
  "type": "structure",
  "members": {
    "EntitlementUsages": {
      "target": "com.amazonaws.licensemanager#EntitlementUsageList",
      "traits": {
        "smithy.api#documentation": "<p>License entitlement usages.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Describes the entitlement usage associated with a license.</p>"
  }
},
"com.amazonaws.licensemanager#LicenseUsageException": {
  "type": "structure",
  "members": {
    "Message": {
      "target": "com.amazonaws.licensemanager#Message"
    }
  },
  "traits": {
    "aws.protocols#awsQueryError": {
      "code": "LicenseUsageFailure",
      "httpResponseCode": 412
    },
    "smithy.api#documentation": "<p>You do not have enough licenses available to support a new resource launch.</p>",
    "smithy.api#error": "client",
    "smithy.api#httpError": 412
  }
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration": {

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"type": "operation",
"input": {
  "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest"
},
"output": {
  "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse"
},
"errors": [
  {
    "target": "com.amazonaws.licensemanager#AccessDeniedException"
  },
  {
    "target": "com.amazonaws.licensemanager#AuthorizationException"
  },
  {
    "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
  },
  {
    "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
  },
  {
    "target": "com.amazonaws.licensemanager#RateLimitExceededException"
  },
  {
    "target": "com.amazonaws.licensemanager#ServerInternalException"
  }
],
"traits": {
  "smithy.api#documentation": "<p>Lists the resource associations for the
specified license configuration.</p>\n    <p>Resource associations need not consume licenses from a license
configuration. \n    For example, an AMI or a stopped instance might not consume a license (depending on \n
the license rules).</p>"
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest": {
"type": "structure",
"members": {
  "LicenseConfigurationArn": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of a license configuration.</p>",
      "smithy.api#required": {}
    }
  },
  "MaxResults": {
    "target": "com.amazonaws.licensemanager#BoxInteger",
    "traits": {

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    "smithy.api#documentation": "<p>Maximum number of results
to return in a single call.</p>"
  }
},
"NextToken": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
  }
}
},
"traits": {
  "smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse": {
  "type": "structure",
  "members": {
    "LicenseConfigurationAssociations": {
      "target": "com.amazonaws.licensemanager#LicenseConfigurationAssociations",
      "traits": {
        "smithy.api#documentation": "<p>Information about the associations for the license
configuration.</p>"
      }
    },
    "NextToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#ListDistributedGrants": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#ListDistributedGrantsRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#ListDistributedGrantsResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    }
  ]
}

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    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Lists the grants distributed for the specified license.</p>"
  }
},
"com.amazonaws.licensemanager#ListDistributedGrantsRequest": {
  "type": "structure",
  "members": {
    "GrantArns": {
      "target": "com.amazonaws.licensemanager#ArnList",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the grants.</p>"
      }
    },
    "Filters": {
      "target": "com.amazonaws.licensemanager#FilterList",
      "traits": {
        "smithy.api#documentation": "<p>Filters to scope the results. The following filters are supported:</p>\n
        <ul>\n
          <li>\n
            <p>\n
              <code>LicenseArn</code>\n
            </p>\n
            </li>\n
          <li>\n
            <p>\n
              <code>GrantStatus</code>\n
            </p>\n
            </li>\n
          <li>\n
            <p>\n
              <code>GranteePrincipalARN</code>\n
            </p>\n
            </li>\n
          <li>\n
            <p>\n
              <code>ProductSKU</code>\n
            </p>\n
            </li>\n
          <li>\n
            <p>\n
              <code>LicenseIssuerName</code>\n
            </p>\n
            </li>\n
        </ul>"
      }
    }
  },
  "NextToken": {
    "target": "com.amazonaws.licensemanager#String",
  }
}

```

```

    "traits": {
      "smithy.api#documentation": "<p>Token for the next set of results.</p>"
    }
  },
  "MaxResults": {
    "target": "com.amazonaws.licensemanager#MaxSize100",
    "traits": {
      "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
    }
  }
},
"traits": {
  "smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListDistributedGrantsResponse": {
  "type": "structure",
  "members": {
    "Grants": {
      "target": "com.amazonaws.licensemanager#GrantList",

"traits": {
  "smithy.api#documentation": "<p>Distributed grant details.</p>"
}
},
"NextToken": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
  }
}
},
"traits": {
  "smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse"
  },
  "errors": [
    {

```

```

"target": "com.amazonaws.licensemanager#AccessDeniedException"
  },
  {
    "target": "com.amazonaws.licensemanager#AuthorizationException"
  },
  {
    "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
  },
  {
    "target": "com.amazonaws.licensemanager#RateLimitExceededException"
  },
  {
    "target": "com.amazonaws.licensemanager#ServerInternalException"
  }
],
"traits": {
  "smithy.api#documentation": "<p>Lists the license configuration operations that failed.</p>"
}
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest": {
  "type": "structure",
  "members": {
    "LicenseConfigurationArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name of the license configuration.</p>",
        "smithy.api#required": {}
      }
    },
    "MaxResults": {
      "target": "com.amazonaws.licensemanager#BoxInteger",
      "traits": {
        "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
      }
    },
    "NextToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse":

```



```

{
  "type": "structure",
  "members": {
    "LicenseOperationFailureList": {
      "target": "com.amazonaws.licensemanager#LicenseOperationFailureList",
      "traits": {
        "smithy.api#documentation": "<p>License configuration operations that failed.</p>"
      }
    },
    "NextToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#ListLicenseConfigurations": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    }
  ]
}

```

```

    ],
    "traits": {
      "smithy.api#documentation": "<p>Lists the license configurations
for your account.</p>"
    }
  },
  "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest": {
    "type": "structure",
    "members": {
      "LicenseConfigurationArns": {
        "target": "com.amazonaws.licensemanager#StringList",
        "traits": {
          "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the license
configurations.</p>"
        }
      },
      "MaxResults": {
        "target": "com.amazonaws.licensemanager#BoxInteger",
        "traits": {
          "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
        }
      },
      "NextToken": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Token for the next
set of results.</p>"
        }
      },
      "Filters": {
        "target": "com.amazonaws.licensemanager#Filters",
        "traits": {
          "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
operators\n are supported:</p>\n <ul>\n <li>\n <p>\n
<code>licenseCountingType</code> - The dimension for which licenses are counted.\n Possible values are
<code>vCPU</code> | <code>Instance</code> | <code>Core</code> | <code>Socket</code>.\n Logical
operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n </li>\n <li>\n
<p>\n <code>enforceLicenseCount</code> - A Boolean value that indicates whether hard license
enforcement is used. \n Logical operators are <code>EQUALS</code> |
<code>NOT_EQUALS</code>.</p>\n
</li>\n <li>\n <p>\n <code>usagelimitExceeded</code> - A Boolean value that
indicates whether the available licenses have been exceeded. \n Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n </li>\n </ul>"
        }
      }
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
}

```

```

    }
  },
  "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse": {
    "type": "structure",
    "members": {
      "LicenseConfigurations": {
        "target": "com.amazonaws.licensemanager#LicenseConfigurations",
        "traits": {
          "smithy.api#documentation": "<p>Information about the license configurations.</p>"
        }
      },
      "NextToken": {
        "target": "com.amazonaws.licensemanager#String",

        "traits": {
          "smithy.api#documentation": "<p>Token for the next set of results.</p>"
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
  },
  "com.amazonaws.licensemanager#ListLicenseConversionTasks": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
      }
    ],
  },

```

```

    "traits": {
      "smithy.api#documentation": "<p>Lists the license type conversion tasks for your account.</p>"
    }
  },
  "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest": {
    "type": "structure",
    "members": {
      "NextToken": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Token for the next set of results.</p>"
        }
      },
      "MaxResults": {
        "target": "com.amazonaws.licensemanager#BoxInteger",
        "traits": {
          "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
        }
      },
      "Filters": {
        "target": "com.amazonaws.licensemanager#Filters",
        "traits": {
          "smithy.api#documentation": "<p>\n    Filters to scope the results. Valid filters are
<code>ResourceArns</code> and <code>Status</code>.\n  </p>"
        }
      }
    },
    "traits": {
      "smithy.api#input": {}
    }
  },
  "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse": {
    "type": "structure",
    "members": {
      "LicenseConversionTasks": {
        "target": "com.amazonaws.licensemanager#LicenseConversionTasks",
        "traits": {
          "smithy.api#documentation": "<p>Information about the license configuration tasks for your
account.</p>"
        }
      },
      "NextToken": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Token for the next set of results.</p>"
        }
      }
    }
  }
}

```

```

    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target":
"com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
      },
      {
        "target": "com.amazonaws.licensemanager#ValidationException"
      }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Lists the report generators for your account.</p>"
    }
  },
  "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest":
{
  "type": "structure",
  "members": {

```

```

    "Filters": {
      "target": "com.amazonaws.licensemanager#FilterList",
      "traits": {
        "smithy.api#documentation": "<p>Filters to scope the results. The following filters are supported:
</p>\n      <ul>\n        <li>\n          <p>\n            <code>LicenseConfigurationArn</code>\n          </li>\n        </ul>\n      }
    },
    "NextToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    },
    "MaxResults": {
      "target": "com.amazonaws.licensemanager#MaxSize100",
      "traits": {
        "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
      }
    },
    "traits": {
      "smithy.api#input": {}
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse": {
      "type": "structure",
      "members": {
        "ReportGenerators": {
          "target": "com.amazonaws.licensemanager#ReportGeneratorList",
          "traits": {
            "smithy.api#documentation": "<p>A report generator that creates periodic reports about your license
configurations.</p>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    },
  },

```

```

"com.amazonaws.licensemanager#ListLicenseSpecificationsForResource": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Describes the license configurations for the specified resource.</p>"
  }
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest": {
  "type": "structure",
  "members": {
    "ResourceArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of a resource that has an associated license configuration.</p>",
        "smithy.api#required": {}
      }
    },
    "MaxResults": {
      "target": "com.amazonaws.licensemanager#BoxInteger",
      "traits": {
        "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
      }
    },
    "NextToken": {

```

```

    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Token for the next set of results.</p>"
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse": {
  "type": "structure",
  "members": {
    "LicenseSpecifications": {
      "target": "com.amazonaws.licensemanager#LicenseSpecifications",
      "traits": {
        "smithy.api#documentation": "<p>License configurations associated with a resource.</p>"
      }
    },
    "NextToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#ListLicenseVersions": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#ListLicenseVersionsRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#ListLicenseVersionsResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    }
  ]
}

```



```

    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Lists all versions of the specified license.</p>"
  }
},
"com.amazonaws.licensemanager#ListLicenseVersionsRequest": {
  "type": "structure",
  "members": {
    "LicenseArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
        "smithy.api#required": {}
      }
    },
    "NextToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    },
    "MaxResults": {
      "target": "com.amazonaws.licensemanager#MaxSize100",
      "traits": {
        "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#ListLicenseVersionsResponse": {
  "type": "structure",
  "members": {
    "Licenses": {
      "target": "com.amazonaws.licensemanager#LicenseList",
      "traits": {
        "smithy.api#documentation": "<p>License details.</p>"
      }
    }
  },
}

```

```

"NextToken": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
  }
},
"traits": {
  "smithy.api#output": {}
},
"com.amazonaws.licensemanager#ListLicenses": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#ListLicensesRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#ListLicensesResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Lists the licenses for your account.</p>"
  }
},
"com.amazonaws.licensemanager#ListLicensesRequest": {
  "type": "structure",
  "members": {
    "LicenseArns": {

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```

    "target": "com.amazonaws.licensemanager#ArnList",
    "traits": {
      "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the licenses.</p>"
    }
  },

  "Filters": {
    "target": "com.amazonaws.licensemanager#FilterList",
    "traits": {
      "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n  <ul>\n    <li>\n      <p>\n        <code>Beneficiary</code>\n      </p>\n    </li>\n    <li>\n      <p>\n        <code>ProductSKU</code>\n      </p>\n    </li>\n    <p>\n      <code>Fingerprint</code>\n    </p>\n    </li>\n    <p>\n      <code>Status</code>\n    </p>\n  </ul>"
    }
  },
  "NextToken": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Token
for the next set of results.</p>"
    }
  },
  "MaxResults": {
    "target": "com.amazonaws.licensemanager#MaxSize100",
    "traits": {
      "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
    }
  }
},
"traits": {
  "smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicensesResponse": {
  "type": "structure",
  "members": {
    "Licenses": {
      "target": "com.amazonaws.licensemanager#LicenseList",
      "traits": {
        "smithy.api#documentation": "<p>License details.</p>"
      }
    }
  },
  "NextToken": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {

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```

"smithy.api#documentation": "<p>Token for the next set of results.</p>"
  }
}
},
"traits": {
  "smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedGrants": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#ListReceivedGrantsRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#ListReceivedGrantsResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Lists grants that are received. Received grants are grants created while specifying the\n    recipient as this Amazon Web Services account, your organization, or an organizational unit\n    (OU) to which this member account belongs.</p>"
  }
},
"com.amazonaws.licensemanager#ListReceivedGrantsForOrganization": {
  "type": "operation",
  "input": {

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    "target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target":
"com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Lists the grants received for all accounts in the organization.</p>"
  }
},
"com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest": {
  "type": "structure",
  "members": {
    "LicenseArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the received license.</p>",
        "smithy.api#required": {}
      }
    },
    "Filters": {
      "target": "com.amazonaws.licensemanager#FilterList",
      "traits": {
        "smithy.api#documentation": "<p>Filters to scope the results. The following filters are supported:</p>\n"
      }
    }
  }
}

```

```

    <ul>\n      <li>\n        <p>\n          <code>ParentArn</code>\n        </p>\n      </li>\n    </ul>\n  }
},
"NextToken": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
  }
},
"MaxResults": {
  "target": "com.amazonaws.licensemanager#MaxSize100",
  "traits": {
    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
  }
}
},
"traits": {
  "smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse":
{
  "type": "structure",
  "members": {
    "Grants": {
      "target": "com.amazonaws.licensemanager#GrantList",
      "traits": {
        "smithy.api#documentation": "<p>Lists the grants the organization has received.</p>"
      }
    },
    "NextToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    }
  }
},
"traits": {
  "smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsRequest": {
  "type": "structure",
  "members": {
    "GrantArns": {
      "target": "com.amazonaws.licensemanager#ArnList",

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```

    "traits": {
      "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the grants.</p>"
    }
  },
  "Filters": {
    "target": "com.amazonaws.licensemanager#FilterList",
    "traits": {
      "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n  <ul>\n    <li>\n      <p>\n        <code>ProductSKU</code>\n      </p>\n    </li>\n    <li>\n      <p>\n        <code>LicenseIssuerName</code>\n      </p>\n    </li>\n    <li>\n      <p>\n        <code>LicenseArn</code>\n      </p>\n    </li>\n    <li>\n      <p>\n        <code>GrantStatus</code>\n      </p>\n    </li>\n    <li>\n      <p>\n        <code>GranterAccountId</code>\n      </p>\n    </li>\n  </ul>"
    }
  },
  "NextToken": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Token for the next set of results.</p>"
    }
  },
  "MaxResults": {
    "target": "com.amazonaws.licensemanager#MaxSize100",
    "traits": {
      "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
    }
  }
},
"traits": {
  "smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsResponse": {
  "type": "structure",
  "members": {
    "Grants": {
      "target": "com.amazonaws.licensemanager#GrantList",
      "traits": {
        "smithy.api#documentation": "<p>Received grant details.</p>"
      }
    }
  },
  "NextToken": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Token for the next set of results.</p>"
    }
  }
}

```

```

    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#ListReceivedLicenses": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#ListReceivedLicensesRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#ListReceivedLicensesResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
      },
      {
        "target": "com.amazonaws.licensemanager#ValidationException"
      }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Lists received licenses.</p>"
    }
  },
  "com.amazonaws.licensemanager#ListReceivedLicensesForOrganization":
{
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse"
  }
}

```



```

    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
      },
      {
        "target": "com.amazonaws.licensemanager#ValidationException"
      }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Lists the licenses received for all accounts in the organization.</p>"
    }
  },
  "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest": {
    "type": "structure",
    "members": {
      "Filters": {
        "target": "com.amazonaws.licensemanager#FilterList",
        "traits": {
          "smithy.api#documentation": "<p>Filters to scope the results. The following filters are supported:</p>\n      <ul>\n        <li>\n          <p>\n            <code>Beneficiary</code>\n          </li>\n        <li>\n          <p>\n            <code>ProductSKU</code>\n          </p>\n        </li>\n      </ul>"
        }
      },
      "NextToken": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Token for the next set of results.</p>"
        }
      }
    },
    "MaxResults": {

```

```

    "target": "com.amazonaws.licensemanager#MaxSize100",
    "traits": {
      "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse": {
  "type": "structure",
  "members": {
    "Licenses": {
      "target": "com.amazonaws.licensemanager#GrantedLicenseList",
      "traits": {
        "smithy.api#documentation": "<p>Lists the licenses the organization has received.</p>"
      }
    },
    "NextToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#ListReceivedLicensesRequest": {
  "type": "structure",
  "members": {
    "LicenseArns": {
      "target": "com.amazonaws.licensemanager#ArnList",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the licenses.</p>"
      }
    }
  },
  "traits": {
    "Filters": {
      "target": "com.amazonaws.licensemanager#FilterList",
      "traits": {
        "smithy.api#documentation": "<p>Filters to scope the results. The following filters are supported:</p>\n
        <ul>\n
          <li>\n
            <p>\n
              <code>ProductSKU</code>\n
            </li>\n
          <li>\n
            <p>\n
              <code>Status</code>\n
            </li>\n
          <li>\n
            <p>\n
              <code>Fingerprint</code>\n
            </li>\n
          <li>\n
            <p>\n
              <code>IssuerName</code>\n
            </li>\n
        </ul>\n
      }
    }
  }
}

```

```

<code>Beneficiary</code>\n      </p>\n    </li>\n  </ul>"
  }
},
"NextToken": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
  }
},
"MaxResults": {
  "target": "com.amazonaws.licensemanager#MaxSize100",
  "traits": {
    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
  }
},
"traits": {
  "smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesResponse": {
  "type": "structure",
  "members": {
    "Licenses": {
      "target": "com.amazonaws.licensemanager#GrantedLicenseList",
      "traits": {
        "smithy.api#documentation": "<p>Received license details.</p>"
      }
    }
  },
  "NextToken": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Token for the next set of results.</p>"
    }
  }
},
"traits": {
  "smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListResourceInventory": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#ListResourceInventoryRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#ListResourceInventoryResponse"
  }
}

```

```

    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#FailedDependencyException"
      },
      {
        "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
      }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Lists resources managed using Systems Manager inventory.</p>"
    }
  },
  "com.amazonaws.licensemanager#ListResourceInventoryRequest": {
    "type": "structure",
    "members": {
      "MaxResults": {
        "target": "com.amazonaws.licensemanager#BoxInteger",
        "traits": {
          "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
        }
      },
      "NextToken": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Token for the next set of results.</p>"
        }
      },
      "Filters": {
        "target": "com.amazonaws.licensemanager#InventoryFilterList",
        "traits": {
          "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical operators are supported:</p>\n      <ul>\n        <li>\n          <p>\n            <code>account_id</code>"

```

- The ID of the Amazon Web Services account that owns the resource. Logical operators are `EQUALS` | `NOT_EQUALS`.

`application_name` - The name of the application. Logical operators are `EQUALS` | `BEGINS_WITH`.

`license_included` - The type of license included. Possible values are `sql-server-enterprise` | `sql-server-standard` | `sql-server-web` | `windows-server-datacenter`.

`platform` - The platform of the resource. Logical operators are `EQUALS` | `BEGINS_WITH`.

`resource_id` - The ID of the resource. Logical operators are `EQUALS` | `NOT_EQUALS`.

`tag:key` - The key/value combination of a tag assigned to the resource. Logical operators are `EQUALS` (single account) or `NOT_EQUALS` (cross account).

```

    }
  },
  "traits": {
    "smithy.api#input": {}
  },
  "com.amazonaws.licensemanager#ListResourceInventoryResponse": {
    "type": "structure",
    "members": {
      "ResourceInventoryList": {
        "target": "com.amazonaws.licensemanager#ResourceInventoryList",
        "traits": {
          "smithy.api#documentation": "<p>Information about the resources.</p>"
        }
      },
      "NextToken": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Token for the next set of results.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#ListTagsForResource": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#ListTagsForResourceRequest"
    },
  },

```

```

"output": {
  "target": "com.amazonaws.licensemanager#ListTagsForResourceResponse"
},
"errors": [
  {
    "target": "com.amazonaws.licensemanager#AccessDeniedException"
  },
  {
    "target": "com.amazonaws.licensemanager#AuthorizationException"
  },
  {
    "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
  },
  {
    "target": "com.amazonaws.licensemanager#RateLimitExceededException"
  },
  {
    "target": "com.amazonaws.licensemanager#ServerInternalException"
  }
],
"traits": {
  "smithy.api#documentation": "<p>Lists the tags for the specified license configuration.</p>"
}
},
"com.amazonaws.licensemanager#ListTagsForResourceRequest": {
  "type": "structure",
  "members": {
    "ResourceArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>",
        "smithy.api#required": {}
      }
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#ListTagsForResourceResponse": {
  "type": "structure",
  "members": {
    "Tags": {
      "target": "com.amazonaws.licensemanager#TagList",
      "traits": {
        "smithy.api#documentation": "<p>Information about the tags.</p>"
      }
    }
  }
}

```

```

    }
  }
},
"traits": {
  "smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListTokens": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#ListTokensRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#ListTokensResponse"
  },
  "errors":
[
  {
    "target": "com.amazonaws.licensemanager#AccessDeniedException"
  },
  {
    "target": "com.amazonaws.licensemanager#AuthorizationException"
  },
  {
    "target": "com.amazonaws.licensemanager#RateLimitExceededException"
  },
  {
    "target": "com.amazonaws.licensemanager#ServerInternalException"
  },
  {
    "target": "com.amazonaws.licensemanager#ValidationException"
  }
],
"traits": {
  "smithy.api#documentation": "<p>Lists your tokens.</p>"
}
},
"com.amazonaws.licensemanager#ListTokensRequest": {
  "type": "structure",
  "members": {
    "TokenIds": {
      "target": "com.amazonaws.licensemanager#StringList",
      "traits": {
        "smithy.api#documentation": "<p>Token IDs.</p>"
      }
    },
    "Filters": {

```

```

        "target": "com.amazonaws.licensemanager#FilterList",
        "traits": {
            "smithy.api#documentation": "<p>Filters to scope the results. The following filter is supported:</p>\n
<ul>\n      <li>\n        <p>\n          <code>LicenseArns</code>\n        </p>\n      </li>\n    </ul>"
        }
    },
    "NextToken": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
        }
    },
    "MaxResults": {
        "target": "com.amazonaws.licensemanager#MaxSize100",
        "traits": {
            "smithy.api#documentation":
"<p>Maximum number of results to return in a single call.</p>"
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#ListTokensResponse": {
    "type": "structure",
    "members": {
        "Tokens": {
            "target": "com.amazonaws.licensemanager#TokenList",
            "traits": {
                "smithy.api#documentation": "<p>Received token details.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListUsageForLicenseConfiguration":
{
    "type": "operation",

```



```

"input": {
  "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest"
},
"output": {
  "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse"
},
"errors": [
  {
    "target": "com.amazonaws.licensemanager#AccessDeniedException"
  },
  {
    "target": "com.amazonaws.licensemanager#AuthorizationException"
  },
  {
    "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
  },
  {
    "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
  },
  {
    "target": "com.amazonaws.licensemanager#RateLimitExceededException"
  },
  {
    "target": "com.amazonaws.licensemanager#ServerInternalException"
  }
],
"traits": {
  "smithy.api#documentation": "<p>Lists all license usage records for a license configuration, displaying
license\n    consumption details by resource at a selected point in time. Use this action to audit the\n    current
license consumption for any license inventory and configuration.</p>"
}
},
"com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest": {
  "type": "structure",
  "members": {
    "LicenseConfigurationArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
        "smithy.api#required": {}
      }
    },
    "MaxResults": {
      "target": "com.amazonaws.licensemanager#BoxInteger",
      "traits": {
        "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
      }
    }
  }
}

```

```

    },
    "NextToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    },
    "Filters": {
      "target": "com.amazonaws.licensemanager#Filters",
      "traits": {
        "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
operators\n    are supported:</p>\n    <ul>\n        <li>\n            <p>\n
<code>resourceArn</code> - The ARN of the license configuration resource.\n
        Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n        </li>\n
        <li>\n            <p>\n                <code>resourceType</code> - The resource type
(<code>EC2_INSTANCE</code> | <code>EC2_HOST</code> | <code>EC2_AMI</code> |
<code>SYSTEMS_MANAGER_MANAGED_INSTANCE</code>). \n                Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n                <p>\n                    <code>resourceAccount</code> - The ID of the account that owns the resource. \n                    Logical operators
are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n                </li>\n            </ul>"
      }
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse": {
  "type": "structure",
  "members": {

"LicenseConfigurationUsageList": {
  "target": "com.amazonaws.licensemanager#LicenseConfigurationUsageList",
  "traits": {
    "smithy.api#documentation": "<p>Information about the license configurations.</p>"
  }
},
"NextToken": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
  }
}
},
"traits": {
  "smithy.api#output": {}
}
},

```

```

"com.amazonaws.licensemanager#Location": {
  "type": "string"
},
"com.amazonaws.licensemanager#Long": {
  "type": "long"
},
"com.amazonaws.licensemanager#ManagedResourceSummary": {
  "type": "structure",
  "members": {
    "ResourceType":
{
    "target": "com.amazonaws.licensemanager#ResourceType",
    "traits": {
      "smithy.api#documentation": "<p>Type of resource associated with a license.</p>"
    }
  },
  "AssociationCount": {
    "target": "com.amazonaws.licensemanager#BoxLong",
    "traits": {
      "smithy.api#documentation": "<p>Number of resources associated with licenses.</p>"
    }
  }
},
  "traits": {
    "smithy.api#documentation": "<p>Summary information about a managed resource.</p>"
  }
},
"com.amazonaws.licensemanager#ManagedResourceSummaryList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#ManagedResourceSummary"
  }
},
"com.amazonaws.licensemanager#MaxSize100": {
  "type": "integer",
  "traits": {
    "smithy.api#range": {
      "min": 1,
      "max": 100
    }
  }
},
"com.amazonaws.licensemanager#MaxSize3StringList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#String"
  }
},

```

```

"traits": {
  "smithy.api#length": {
    "min": 0,
    "max": 3
  }
},
"com.amazonaws.licensemanager#Message": {
  "type": "string"
},
"com.amazonaws.licensemanager#Metadata": {
  "type": "structure",
  "members": {
    "Name": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>The key name.</p>"
      }
    },
  },
"Value": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>The value.</p>"
  }
},
"traits": {
  "smithy.api#documentation": "<p>Describes key/value pairs.</p>"
},
"com.amazonaws.licensemanager#MetadataList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#Metadata"
  }
},
"com.amazonaws.licensemanager#NoEntitlementsAllowedException": {
  "type": "structure",
  "members": {
    "Message": {
      "target": "com.amazonaws.licensemanager#Message"
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>There are no entitlements found for this license, or the entitlement
maximum count is reached.</p>",

```

```

    "smithy.api#error": "client",
    "smithy.api#httpError": 400
  }
},
"com.amazonaws.licensemanager#Options": {
  "type": "structure",
  "members": {
    "ActivationOverrideBehavior": {
      "target": "com.amazonaws.licensemanager#ActivationOverrideBehavior",
      "traits": {
        "smithy.api#documentation": "<p>An activation option for your grant that determines the behavior of
activating a grant.\n      Activation options can only be used with granted licenses sourced from the Amazon Web
Services Marketplace. Additionally, the operation must specify the value of <code>ACTIVE</code> for the\n
<code>Status</code> parameter.</p>\n      <ul>\n        <li>\n          <p>As a license administrator, you can
optionally specify an\n          <code>ActivationOverrideBehavior</code> when activating a grant.</p>\n
</li>\n        <li>\n          <p>As a grantor, you can optionally specify an\n
<code>ActivationOverrideBehavior</code> when you activate a grant for a grantee\n          account in your
organization.</p>\n        </li>\n        <li>\n          <p>As a grantee, if the grantor creating the distributed
grant doesnt specify an\n          <code>ActivationOverrideBehavior</code>, you can optionally specify one
when you\n          are activating the grant.</p>\n        </li>\n      </ul>\n      <dl>\n
<dt>DISTRIBUTED_GRANTS_ONLY</dt>\n        <dd>\n          <p>Use this value to activate a grant
without replacing any member accounts\n          active grants for the same product.</p>\n        </dd>\n
<dt>ALL_GRANTS_PERMITTED_BY_ISSUER</dt>\n        <dd>\n          <p>Use this value to activate a
grant and disable other active grants in any\n          member accounts
for the same product. This action will also replace their\n          previously activated grants with this activated
grant.</p>\n        </dd>\n      </dl>"
      }
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>The options you can specify when you create a new version of a grant,
such as activation\n      override behavior. For more information, see <a
href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-licenses.html\">Granted licenses in
License Manager</a> in the <i>License Manager User Guide</i>.</p>"
  }
},
"com.amazonaws.licensemanager#OrganizationConfiguration": {
  "type": "structure",
  "members": {
    "EnableIntegration": {
      "target": "com.amazonaws.licensemanager#Boolean",
      "traits": {
        "smithy.api#default": false,
        "smithy.api#documentation":
"<p>Enables Organizations integration.</p>",
        "smithy.api#required": {}
      }
    }
  }
}

```

```

    },
    "traits": {
      "smithy.api#documentation": "<p>Configuration information for Organizations.</p>"
    }
  },
  "com.amazonaws.licensemanager#PrincipalArnList": {
    "type": "list",
    "member": {
      "target": "com.amazonaws.licensemanager#Arn"
    },
    "traits": {
      "smithy.api#length": {
        "min": 1,
        "max": 1
      }
    }
  },
  "com.amazonaws.licensemanager#ProductInformation": {
    "type": "structure",
    "members": {
      "ResourceType": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Resource type. The
possible values are <code>SSM_MANAGED</code> | <code>RDS</code>.</p>",
          "smithy.api#required": {}
        }
      },
      "ProductInformationFilterList": {
        "target": "com.amazonaws.licensemanager#ProductInformationFilterList",
        "traits": {
          "smithy.api#documentation": "<p>A Product information filter consists of a
<code>ProductInformationFilterComparator</code> which is a logical operator, a
<code>ProductInformationFilterName</code> which specifies the type of filter being declared, and a
<code>ProductInformationFilterValue</code> that specifies the value to filter on. </p>\n    <p>Accepted values
for <code>ProductInformationFilterName</code> are listed here along with descriptions and valid options for
<code>ProductInformationFilterComparator</code>. </p>\n    <p>The following filters and are supported when
the resource type \n    is <code>SSM_MANAGED</code>:</p>\n
    <ul>\n    <li>\n    <p>\n    <code>Application Name</code> - The name of the
application.\n    Logical operator is <code>EQUALS</code>.</p>\n    </li>\n    <li>\n    <p>\n    <code>Application Publisher</code> - The publisher of the application.\n    Logical
operator is <code>EQUALS</code>.</p>\n    </li>\n    <li>\n    <p>\n    <code>Application Version</code> - The version of the application.\n    Logical operator is
<code>EQUALS</code>.</p>\n    </li>\n    <li>\n    <p>\n    <code>Platform
Name</code> - The name of the platform.\n    Logical operator is <code>EQUALS</code>.</p>\n
    </li>\n    <li>\n    <p>\n    <code>Platform Type</code> - The platform type.\n
    Logical operator is <code>EQUALS</code>.</p>\n

```

`Tag:key` - The key of a tag attached to an Amazon Web Services resource you wish to exclude from automated discovery. Logical operator is `NOT_EQUALS`. The key for your tag must be appended to `Tag:` following the example: `Tag:name-of-your-key`. `ProductInformationFilterValue` is optional if you are not using values for the key.

`AccountId` - The 12-digit ID of an Amazon Web Services account you wish to exclude from automated discovery. Logical operator is `NOT_EQUALS`.

`License Included` - The type of license included. Logical operators are `EQUALS` and `NOT_EQUALS`. Possible values are: `sql-server-enterprise` | `sql-server-standard` | `sql-server-web` | `windows-server-datacenter`.

The following filters and logical operators are supported when the resource type is `RDS`:

- `Engine Edition` - The edition of the database engine. Logical operator is `EQUALS`. Possible values are: `oracle-ee` | `oracle-se` | `oracle-se1` | `oracle-se2`.
- `License Pack` - The license pack. Logical operator is `EQUALS`. Possible values are: `data guard` | `diagnostic pack sqlt` | `tuning pack sqlt` | `ols` | `olap`.

```

</li>\n    </ul>",
    "smithy.api#required": {}
  }
},
"traits": {
  "smithy.api#documentation": "<p>Describes product information for a license configuration.</p>"
},
"com.amazonaws.licensemanager#ProductInformationFilter": {
  "type": "structure",
  "members": {
    "ProductInformationFilterName": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Filter name.</p>",
        "smithy.api#required": {}
      }
    },
    "ProductInformationFilterValue": {
      "target": "com.amazonaws.licensemanager#StringList",
      "traits": {
        "smithy.api#documentation": "<p>Filter value.</p>"
      }
    },
    "ProductInformationFilterComparator": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {

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        "smithy.api#documentation": "<p>Logical operator.</p>",
        "smithy.api#required": {}
    }
}
},
"traits": {
    "smithy.api#documentation": "<p>Describes product information filters.</p>"
}
},
"com.amazonaws.licensemanager#ProductInformationFilterList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ProductInformationFilter"
    }
},
"com.amazonaws.licensemanager#ProductInformationList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ProductInformation"
    }
},
"com.amazonaws.licensemanager#ProvisionalConfiguration": {
    "type": "structure",
    "members": {
        "MaxTimeToLiveInMinutes": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {
                "smithy.api#documentation": "<p>Maximum time for the provisional configuration, in minutes.</p>",
                "smithy.api#required": {}
            }
        }
    }
},
"traits": {
    "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
}
},
"com.amazonaws.licensemanager#RateLimitExceededException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    }
},
"traits": {
    "aws.protocols#awsQueryError": {
        "code": "RateLimitExceeded",
        "httpResponseCode": 429
    }
},

```



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    "smithy.api#documentation": "<p>Too many requests have been submitted. Try again after a brief
wait.</p>",
    "smithy.api#error": "client",
    "smithy.api#httpError": 429
  }
},
"com.amazonaws.licensemanager#ReceivedMetadata": {
  "type": "structure",
  "members": {
    "ReceivedStatus": {
      "target": "com.amazonaws.licensemanager#ReceivedStatus",
      "traits": {
        "smithy.api#documentation": "<p>Received status.</p>"
      }
    },
    "ReceivedStatusReason": {
      "target": "com.amazonaws.licensemanager#StatusReasonMessage",
      "traits": {
        "smithy.api#documentation": "<p>Received
status reason.</p>"
      }
    },
    "AllowedOperations": {
      "target": "com.amazonaws.licensemanager#AllowedOperationList",
      "traits": {
        "smithy.api#documentation": "<p>Allowed operations.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Metadata associated with received licenses and grants.</p>"
  }
},
"com.amazonaws.licensemanager#ReceivedStatus": {
  "type": "enum",
  "members": {
    "PENDING_WORKFLOW": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "PENDING_WORKFLOW"
      }
    },
    "PENDING_ACCEPT": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue":
"PENDING_ACCEPT"
      }
    }
  }
}

```

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    },
    "REJECTED": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "REJECTED"
      }
    },
    "ACTIVE": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "ACTIVE"
      }
    },
    "FAILED_WORKFLOW": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "FAILED_WORKFLOW"
      }
    },
    "DELETED": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "DELETED"
      }
    },
    "DISABLED": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "DISABLED"
      }
    },
    "WORKFLOW_COMPLETED": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "WORKFLOW_COMPLETED"
      }
    }
  }
},
"com.amazonaws.licensemanager#RedirectException": {
  "type": "structure",
  "members": {
    "Location": {
      "target": "com.amazonaws.licensemanager#Location",
      "traits": {
        "smithy.api#httpHeader": "Location"
      }
    }
  },
}

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    "Message": {
      "target": "com.amazonaws.licensemanager#Message"
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>This is not the correct Region for the resource. Try again.</p>",
    "smithy.api#error": "client",
    "smithy.api#httpError": 308
  }
},
"com.amazonaws.licensemanager#RejectGrant": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#RejectGrantRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#RejectGrantResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target":
"com.amazonaws.licensemanager#ResourceLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Rejects the specified grant.</p>"
  }
},
"com.amazonaws.licensemanager#RejectGrantRequest": {
  "type": "structure",

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"members": {
  "GrantArn": {
    "target": "com.amazonaws.licensemanager#Arn",
    "traits": {
      "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
      "smithy.api#required": {}
    }
  }
},
"traits": {
  "smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#RejectGrantResponse": {
  "type": "structure",
  "members": {
    "GrantArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>Grant ARN.</p>"
      }
    },
    "Status": {
      "target": "com.amazonaws.licensemanager#GrantStatus",
      "traits": {
        "smithy.api#documentation": "<p>Grant status.</p>"
      }
    },
    "Version": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Grant version.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#RenewType":
{
  "type": "enum",
  "members": {
    "NONE": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "None"
      }
    }
  }
}

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    }
  },
  "WEEKLY": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Weekly"
    }
  },
  "MONTHLY": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Monthly"
    }
  }
}
},
"com.amazonaws.licensemanager#ReportContext": {
  "type": "structure",
  "members": {
    "licenseConfigurationArns": {
      "target": "com.amazonaws.licensemanager#ArnList",
      "traits": {

        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration that this
generator reports on.</p>",
        "smithy.api#required": {}
      }
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Details of the license configuration that this generator reports on.</p>"
  }
},
"com.amazonaws.licensemanager#ReportFrequency": {
  "type": "structure",
  "members": {
    "value": {
      "target": "com.amazonaws.licensemanager#Integer",
      "traits": {
        "smithy.api#documentation": "<p>Number of times within the frequency period that a report is
generated. \n    The only supported value is <code>1</code>.</p>"
      }
    }
  },
  "period": {
    "target": "com.amazonaws.licensemanager#ReportFrequencyType",

    "traits": {
      "smithy.api#documentation": "<p>Time period between each report. The period can be daily, weekly,

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or monthly.</p>"
    }
  }
},
"traits": {
  "smithy.api#documentation": "<p>Details about how frequently reports are generated.</p>"
}
},
"com.amazonaws.licensemanager#ReportFrequencyType": {
  "type": "enum",
  "members": {
    "DAY": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "DAY"
      }
    },
    "WEEK": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "WEEK"
      }
    },
    "MONTH": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "MONTH"
      }
    }
  }
},
"com.amazonaws.licensemanager#ReportGenerator": {
  "type": "structure",
  "members": {
    "ReportGeneratorName": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Name of the report generator.</p>"
      }
    },
    "ReportType": {
      "target": "com.amazonaws.licensemanager#ReportTypeList",
      "traits": {
        "smithy.api#documentation": "<p>Type of reports that are generated.</p>"
      }
    },
    "ReportContext": {

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        "target": "com.amazonaws.licensemanager#ReportContext",
        "traits": {
            "smithy.api#documentation": "<p>License
configuration type for this generator.</p>"
        }
    },
    "ReportFrequency": {
        "target": "com.amazonaws.licensemanager#ReportFrequency",
        "traits": {
            "smithy.api#documentation": "<p>Details about how frequently reports are generated.</p>"
        }
    },
    "LicenseManagerReportGeneratorArn": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator.</p>"
        }
    },
    "LastRunStatus": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
            "smithy.api#documentation": "<p>Status of the last report generation attempt.</p>"
        }
    },
    "LastRunFailureReason":
{
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
        "smithy.api#documentation": "<p>Failure message for the last report generation attempt.</p>"
    }
},
    "LastReportGenerationTime": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
            "smithy.api#documentation": "<p>Time the last report was generated at.</p>"
        }
    },
    "ReportCreatorAccount": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
            "smithy.api#documentation": "<p>The Amazon Web Services account ID used to create the report
generator.</p>"
        }
    },
    "Description": {
        "target": "com.amazonaws.licensemanager#String",

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"traits": {
    "smithy.api#documentation": "<p>Description of the report generator.</p>"
  },
  "S3Location": {
    "target": "com.amazonaws.licensemanager#S3Location",
    "traits": {
      "smithy.api#documentation": "<p>Details of the S3 bucket that report generator reports are published
to.</p>"
    }
  },
  "CreateTime": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Time the report was created.</p>"
    }
  },
  "Tags": {
    "target": "com.amazonaws.licensemanager#TagList",
    "traits": {
      "smithy.api#documentation": "<p>Tags associated with the report generator.</p>"
    }
  }
},
"traits": {
  "smithy.api#documentation": "<p>Describe the details of a report generator.</p>"
}
},
"com.amazonaws.licensemanager#ReportGeneratorList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#ReportGenerator"
  }
},
"com.amazonaws.licensemanager#ReportGeneratorName": {
  "type": "string",
  "traits": {
    "smithy.api#length": {
      "min": 1,
      "max": 100
    }
  }
},
"com.amazonaws.licensemanager#ReportType": {
  "type": "enum",
  "members": {
    "LICENSE_CONFIGURATION_SUMMARY_REPORT": {

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        "target": "smithy.api#Unit",
        "traits": {
            "smithy.api#enumValue": "LicenseConfigurationSummaryReport"
        }
    },
    "LICENSE_CONFIGURATION_USAGE_REPORT": {
        "target": "smithy.api#Unit",
        "traits": {
            "smithy.api#enumValue": "LicenseConfigurationUsageReport"
        }
    }
},
"com.amazonaws.licensemanager#ReportTypeList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ReportType"
    }
},
"com.amazonaws.licensemanager#ResourceInventory": {
    "type": "structure",
    "members": {
        "ResourceId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>ID of the resource.</p>"
            }
        },
        "ResourceType": {
            "target": "com.amazonaws.licensemanager#ResourceType",
            "traits": {
                "smithy.api#documentation": "<p>Type of resource.</p>"
            }
        },
        "ResourceArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
            }
        },
        "Platform": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Platform of the resource.</p>"
            }
        }
    }
},

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    "PlatformVersion": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Platform version of the resource in the inventory.</p>"
      }
    },
    "ResourceOwningAccountId": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>ID of the account that owns the resource.</p>"
      }
    },
    "traits": {
      "smithy.api#documentation": "<p>Details about a resource.</p>"
    }
  },
  "com.amazonaws.licensemanager#ResourceInventoryList": {
    "type": "list",
    "member": {
      "target": "com.amazonaws.licensemanager#ResourceInventory"
    }
  },
  "com.amazonaws.licensemanager#ResourceLimitExceededException": {
    "type": "structure",
    "members": {
      "Message": {
        "target": "com.amazonaws.licensemanager#Message"
      }
    },
    "traits": {
      "aws.protocols#awsQueryError": {
        "code": "ResourceLimitExceeded",

        "httpResponseCode": 400
      },
      "smithy.api#documentation": "<p>Your resource limits have been exceeded.</p>",
      "smithy.api#error": "client",
      "smithy.api#httpError": 400
    }
  },
  "com.amazonaws.licensemanager#ResourceNotFoundException": {
    "type": "structure",
    "members": {
      "Message": {
        "target": "com.amazonaws.licensemanager#Message"
      }
    }
  }
}

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    },
    "traits": {
      "aws.protocols#awsQueryError": {
        "code": "InvalidResource.NotFound",
        "httpResponseCode": 400
      },
      "smithy.api#documentation": "<p>The resource cannot be found.</p>",
      "smithy.api#error": "client",
      "smithy.api#httpError": 400
    }
  },
  "com.amazonaws.licensemanager#ResourceType": {
    "type": "enum",
    "members": {
      "EC2_INSTANCE": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "EC2_INSTANCE"
        }
      },
      "EC2_HOST": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "EC2_HOST"
        }
      },
      "EC2_AMI": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "EC2_AMI"
        }
      },
      "RDS": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "RDS"
        }
      },
      "SYSTEMS_MANAGER_MANAGED_INSTANCE": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "SYSTEMS_MANAGER_MANAGED_INSTANCE"
        }
      }
    }
  },
  "com.amazonaws.licensemanager#S3Location": {
    "type": "structure",

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"members": {
  "bucket": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Name of the S3 bucket reports are published to.</p>"
    }
  },
  "keyPrefix": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Prefix of the S3 bucket reports are published to.</p>"
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Details of the S3 bucket that report generator reports are published
to.</p>"
  }
},
"com.amazonaws.licensemanager#ServerInternalException": {
  "type": "structure",
  "members": {
    "Message": {
      "target": "com.amazonaws.licensemanager#Message"
    }
  },
  "traits": {
    "aws.protocols#awsQueryError": {
      "code": "InternalServerError",
      "httpResponseCode": 500
    },
    "smithy.api#documentation": "<p>The server experienced an internal error. Try again.</p>",
    "smithy.api#error": "server",
    "smithy.api#httpError": 500
  }
},
"com.amazonaws.licensemanager#SignedToken": {
  "type": "string",
  "traits": {
    "smithy.api#length": {
      "min": 4096
    }
  }
},
"com.amazonaws.licensemanager#StatusReasonMessage": {
  "type": "string",
  "traits":

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{
  "smithy.api#length": {
    "min": 0,
    "max": 400
  },
  "smithy.api#pattern": "^[\s\S]+$"
}
},
"com.amazonaws.licensemanager#String": {
  "type": "string"
},
"com.amazonaws.licensemanager#StringList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#String"
  }
},
"com.amazonaws.licensemanager#Tag": {
  "type": "structure",
  "members": {
    "Key": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Tag key.</p>"
      }
    },
    "Value": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation":
"<p>Tag value.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Details about a tag for a license configuration.</p>"
  }
},
"com.amazonaws.licensemanager#TagKeyList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#String"
  }
},
"com.amazonaws.licensemanager#TagList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#Tag"
  }
}

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    }
  },
  "com.amazonaws.licensemanager#TagResource": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#TagResourceRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#TagResourceResponse"
    },
    "errors": [
      {
        "target":
"com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
      }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Adds the specified tags to the specified license configuration.</p>"
    }
  },
  "com.amazonaws.licensemanager#TagResourceRequest": {
    "type": "structure",
    "members": {
      "ResourceArn": {
        "target": "com.amazonaws.licensemanager#String",
        "traits":
{
          "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
          "smithy.api#required": {}
        }
      },
      "Tags": {
        "target": "com.amazonaws.licensemanager#TagList",
        "traits": {
          "smithy.api#documentation": "<p>One or more tags.</p>",

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        "smithy.api#required": {}
    }
}
},
"traits": {
    "smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#TagResourceResponse": {
    "type": "structure",
    "members": {},
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#TokenData": {
    "type": "structure",
    "members": {
        "TokenId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token ID.</p>"
            }
        },
        "TokenType": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Type of token generated. The supported value is
<code>REFRESH_TOKEN</code>.</p>"
            }
        },
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
            }
        },
        "ExpirationTime": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Token expiration time, in ISO8601-UTC
format.</p>"
            }
        },
        "TokenProperties": {
            "target": "com.amazonaws.licensemanager#MaxSize3StringList",
            "traits": {
                "smithy.api#documentation": "<p>Data specified by the caller.</p>"
            }
        }
    }
}

```

```

    }
  },
  "RoleArns": {
    "target": "com.amazonaws.licensemanager#ArnList",
    "traits": {
      "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the roles included in the
token.</p>"
    }
  },
  "Status": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Token status. The possible values are
<code>AVAILABLE</code> and <code>DELETED</code>.</p>"
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Describes a token.</p>"
  }
},
"com.amazonaws.licensemanager#TokenList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#TokenData"
  }
},
"com.amazonaws.licensemanager#TokenString": {
  "type": "string",
  "traits": {
    "smithy.api#length": {
      "min": 0,
      "max": 4096
    },
    "smithy.api#pattern": "^\\S+$"
  }
},
"com.amazonaws.licensemanager#TokenType": {
  "type": "enum",
  "members": {
    "REFRESH_TOKEN": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "REFRESH_TOKEN"
      }
    }
  }
}

```



```

    },
    "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException":
    {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The digital signature method is unsupported. Try your request
again.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#UntagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#UntagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#UntagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Removes the specified tags from the specified license
configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#UntagResourceRequest": {
        "type": "structure",

```

```

"members": {
  "ResourceArn": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
      "smithy.api#required": {}
    }
  },
  "TagKeys": {
    "target": "com.amazonaws.licensemanager#TagKeyList",
    "traits": {
      "smithy.api#documentation": "<p>Keys identifying the tags to remove.</p>",
      "smithy.api#required": {}
    }
  }
},
"traits": {
  "smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UntagResourceResponse": {
  "type": "structure",
  "members": {},
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#UpdateLicenseConfiguration": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {

```

```

        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
        "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
    },
    {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
    }
],
"traits": {
    "smithy.api#documentation": "<p>Modifies the attributes of an existing license configuration.</p>"
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest": {
    "type": "structure",
    "members": {
        "LicenseConfigurationArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "configuration.</p>",
                "smithy.api#required": {}
            }
        },
        "LicenseConfigurationStatus": {
            "target": "com.amazonaws.licensemanager#LicenseConfigurationStatus",
            "traits": {
                "smithy.api#documentation": "New status of the license configuration.</p>"
            }
        },
        "LicenseRules": {
            "target": "com.amazonaws.licensemanager#StringList",
            "traits": {
                "smithy.api#documentation": "New license rule. The only rule that you can add after you create a license\nconfiguration is licenseAffinityToHost.</p>"
            }
        },
        "LicenseCount": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
                "smithy.api#documentation": "New number of licenses managed by the license\nconfiguration.</p>"
            }
        },
        "LicenseCountHardLimit": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {

```

```

        "smithy.api#documentation": "<p>New hard limit of the number of available licenses.</p>"
    }
},
"Name": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
        "smithy.api#documentation": "<p>New name
of the license configuration.</p>"
    }
},
"Description": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
        "smithy.api#documentation": "<p>New description of the license configuration.</p>"
    }
},
"ProductInformationList": {
    "target": "com.amazonaws.licensemanager#ProductInformationList",
    "traits": {
        "smithy.api#documentation": "<p>New product information.</p>"
    }
},
"DisassociateWhenNotFound": {
    "target": "com.amazonaws.licensemanager#BoxBoolean",
    "traits": {
        "smithy.api#documentation": "<p>When true, disassociates a resource when software is
uninstalled.</p>"
    }
}
},
"traits":
{
    "smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse": {
    "type": "structure",
    "members": {},
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest"
    },
    "output": {

```

```

    "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Updates a report generator.</p>\n    <p>After you make changes to a report generator, it starts generating new reports within 60 minutes of being updated.</p>"
  },
  "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest":
  {
    "type": "structure",
    "members": {
      "LicenseManagerReportGeneratorArn": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator to update.</p>",
          "smithy.api#required": {}
        }
      },
      "ReportGeneratorName": {
        "target": "com.amazonaws.licensemanager#ReportGeneratorName",
        "traits": {

```

```

        "smithy.api#documentation": "<p>Name of the report generator.</p>",
        "smithy.api#required": {}
    }
},
"Type": {
    "target": "com.amazonaws.licensemanager#ReportTypeList",
    "traits": {
        "smithy.api#documentation":
"<p>Type of reports to generate. The following report types are supported:</p>\n    <ul>\n        <li>\n<p>License configuration report - Reports the number and details of consumed licenses for a license
configuration.</p>\n    </li>\n        <li>\n        <p>Resource report - Reports the tracked licenses and
resource consumption for a license configuration.</p>\n    </li>\n    </ul>",
        "smithy.api#required": {}
    }
},
"ReportContext": {
    "target": "com.amazonaws.licensemanager#ReportContext",
    "traits": {
        "smithy.api#documentation": "<p>The report context.</p>",
        "smithy.api#required": {}
    }
},
"ReportFrequency": {
    "target": "com.amazonaws.licensemanager#ReportFrequency",
    "traits":
{
    "smithy.api#documentation": "<p>Frequency by which reports are generated.</p>",
    "smithy.api#required": {}
}
},
"ClientToken": {
    "target": "com.amazonaws.licensemanager#ClientRequestToken",
    "traits": {
        "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",
        "smithy.api#required": {}
    }
},
"Description": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
        "smithy.api#documentation": "<p>Description of the report generator.</p>"
    }
}
},
"traits": {
    "smithy.api#input": {}
}
}

```

```

    },
    "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse":
    {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidResourceStateException"
            },
            {
                "target": "com.amazonaws.licensemanager#LicenseUsageException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds or removes the specified license configurations for the specified Amazon Web Services resource.</p>\n    <p>You can update the license specifications of AMIs, instances, and hosts.\n    You cannot update the license specifications for launch templates and CloudFormation templates, \n    as they send license configurations to the operation that creates the resource.</p>"
        }
    },

```

```

"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest": {
  "type": "structure",
  "members": {
    "ResourceArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon Web Services
resource.</p>",
        "smithy.api#required": {}
      }
    },
    "AddLicenseSpecifications": {
      "target": "com.amazonaws.licensemanager#LicenseSpecifications",
      "traits": {
        "smithy.api#documentation": "<p>ARNs of the license configurations to add.</p>"
      }
    },
    "RemoveLicenseSpecifications": {
      "target": "com.amazonaws.licensemanager#LicenseSpecifications",
      "traits": {
        "smithy.api#documentation":
"<p>ARNs of the license configurations to remove.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse": {
  "type": "structure",
  "members": {},
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#UpdateServiceSettings": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#UpdateServiceSettingsRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#UpdateServiceSettingsResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    }
  ]
}

```



```

    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Updates License Manager settings for the current Region.</p>"
  }
},
"com.amazonaws.licensemanager#UpdateServiceSettingsRequest": {
  "type": "structure",
  "members": {
    "S3BucketArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon S3 bucket where
the License
Manager information is stored.</p>"
      }
    },
    "SnsTopicArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon SNS topic used
for License Manager alerts.</p>"
      }
    }
  },
  "OrganizationConfiguration": {
    "target": "com.amazonaws.licensemanager#OrganizationConfiguration",
    "traits": {
      "smithy.api#documentation": "<p>Enables integration with Organizations for cross-account
discovery.</p>"
    }
  },
  "EnableCrossAccountsDiscovery": {
    "target": "com.amazonaws.licensemanager#BoxBoolean",
    "traits": {
      "smithy.api#documentation": "<p>Activates cross-account discovery.</p>"
    }
  }
}

```

```

    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#UpdateServiceSettingsResponse": {
  "type": "structure",
  "members": {},
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#UsageOperation": {
  "type": "string",
  "traits": {
    "smithy.api#length": {
      "min": 0,
      "max": 50
    }
  }
},
"com.amazonaws.licensemanager#ValidationException": {
  "type": "structure",
  "members": {
    "Message": {
      "target": "com.amazonaws.licensemanager#Message"
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",

    "smithy.api#error": "client",
    "smithy.api#httpError": 400
  }
}
}
}

```

## 1.332 aws-aws-sdk-go-v2-internal-configsources 1.3.15

## 1.332.1 Available under license :

name: License Scan

on: [pull\_request]

jobs:

licensescan:

name: License Scan

runs-on: ubuntu-latest

strategy:

matrix:

python-version: [3.9]

steps:

- name: Checkout target
  - uses: actions/checkout@v2
  - with:
    - path: sdkbase
    - ref: \${{ github.base\_ref }}
- name: Checkout this ref
  - uses: actions/checkout@v2
  - with:
    - path: new-ref
    - fetch-depth: 0
- name: Get Diff
  - run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT \${{ github.event.pull\_request.base.sha }} \${{ github.sha }} > refDiffFiles.txt
- name: Get Target Files
  - run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
- name: Checkout scancode
  - uses: actions/checkout@v2
  - with:
    - repository: nexB/scancode-toolkit
    - path: scancode-toolkit
    - fetch-depth: 1
- name: Set up Python \${{ matrix.python-version }}
  - uses: actions/setup-python@v2
  - with:
    - python-version: \${{ matrix.python-version }}
- # ScanCode
  - name: Self-configure scancode
    - working-directory: ./scancode-toolkit
    - run: ./scancode --help
  - name: Run Scan code on target
    - run: cat targetFiles.txt | while read filename; do echo ./sdkbase/\$filename; done | xargs ./scancode-toolkit/scancode -l -n 30 --json-pp - | grep short\_name | sort | uniq >> old-licenses.txt
  - name: Run Scan code on pr ref
    - run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/\$filename; done | xargs ./scancode-

```
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
# compare
- name: License test
  run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses
are the same. Success."; exit 0; fi
CreateLicense
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
Retry
RetryMetricsHeader
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
ListReceivedLicenses
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
Serialize stack step
setOperationInput
```

```

ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
Retry
RetryMetricsHeader
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

```

```
package licensemanager
```

```

import (
    "context"
    "fmt"
    awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
    "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
    "github.com/aws/smithy-go/middleware"
    smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
//
// If the account that created the license is the same that is performing the
// check out, you must specify the account as the beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
    if params == nil {

```

```

params = &CheckoutLicenseInput{
}

result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
if err != nil {
return nil, err
}

out := result.(*CheckoutLicenseOutput)
out.ResultMetadata = metadata
return out, nil
}

type CheckoutLicenseInput struct {

//
Checkout type.
//
// This member is required.
CheckoutType types.CheckoutType

// Unique, case-sensitive identifier that you provide to ensure the idempotency of
// the request.
//
// This member is required.
ClientToken *string

// License entitlements.
//
// This member is required.
Entitlements []types.EntitlementData

// Key fingerprint identifying the license.
//
// This member is required.
KeyFingerprint *string

// Product SKU.
//
// This member is required.
ProductSKU *string

// License beneficiary.
Beneficiary *string

// Node ID.
NodeId *string

```

```

noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

// Checkout type.
CheckoutType types.CheckoutType

// Allowed license entitlements.
EntitlementsAllowed []types.EntitlementData

// Date and time at which the license checkout expires.
Expiration *string

// Date and time at which the license checkout is issued.
IssuedAt *string

// Amazon Resource Name (ARN) of the checkout license.
LicenseArn
*string

// License consumption token.
LicenseConsumptionToken *string

// Node ID.
NodeId *string

// Signed token.
SignedToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
if err := stack.Serialize.Add(&setOperationInputMiddleware{ }, middleware.After); err != nil {
return err
}
err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{ }, middleware.After)
if err != nil {
return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{ }, middleware.After)
if err != nil {
return err
}
}

```

```

}
if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
    return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addLegacyEndpointContextSetter(stack, options); err != nil {
    return err
}
if err = addSetLoggerMiddleware(stack,
options); err != nil {
    return err
}
if err = addClientRequestID(stack); err != nil {
    return err
}
if err = addComputeContentLength(stack); err != nil {
    return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
    return err
}
if err = addComputePayloadSHA256(stack); err != nil {
    return err
}
if err = addRetry(stack, options); err != nil {
    return err
}
if err = addRawResponseToMetadata(stack); err != nil {
    return err
}
if err = addRecordResponseTiming(stack); err != nil {
    return err
}
if err = addClientUserAgent(stack, options); err != nil {
    return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
    return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
    return err
}
}

```



```

if err = addUserAgentRetryMode(stack,
options); err != nil {
    return err
}
if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
    return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
    return err
}
if err = addRecursionDetection(stack); err != nil {
    return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
    return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
    return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
    return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
    return err
}
return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
    return &awsmiddleware.RegisterServiceMetadata{
        Region:    region,
        ServiceID: ServiceID,
        OperationName: "CheckoutLicense",
    }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
    "context"
    "fmt"
    awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
    "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
    "github.com/aws/smithy-go/middleware"
    smithyhttp "github.com/aws/smithy-go/transport/http"

```

```

)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
    if params == nil {
        params = &CreateLicenseInput{}
    }

    result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
    if err != nil {
        return nil, err
    }

    out := result.(*CreateLicenseOutput)
    out.ResultMetadata = metadata
    return out, nil
}

type CreateLicenseInput struct {

    // License beneficiary.
    //
    // This member is required.
    Beneficiary *string

    // Unique, case-sensitive identifier that you provide to ensure the idempotency of
    // the request.
    //
    //
    // This member is required.
    ClientToken *string

    // Configuration for consumption of the license. Choose a provisional
    // configuration for workloads running with continuous connectivity. Choose a
    // borrow configuration for workloads with offline usage.
    //
    // This member is required.
    ConsumptionConfiguration *types.ConsumptionConfiguration

    // License entitlements.
    //
    // This member is required.
    Entitlements []types.Entitlement

    // Home Region for the license.
    //

```

```

// This member is required.
HomeRegion *string

// License issuer.
//
// This member is required.
Issuer *types.Issuer

// License name.
//
// This member is required.
LicenseName *string

// Product name.
//
// This member is required.
ProductName *string

// Product SKU.
//
// This member is required.
ProductSKU *string

// Date and time range during which the license is valid, in ISO8601-UTC format.
//
// This member is required.
Validity *types.DatetimeRange

// Information about
the license.
LicenseMetadata []types.Metadata

noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

// Amazon Resource Name (ARN) of the license.
LicenseArn *string

// License status.
Status types.LicenseStatus

// License version.
Version *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

```

```

noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
if err := stack.Serialize.Add(&setOperationInputMiddleware{ }, middleware.After); err != nil {
return err
}
err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{ }, middleware.After)
if err != nil {
return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{ }, middleware.After)
if err != nil {
return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
return fmt.Errorf("add protocol finalizers: %v", err)
}

if
err = addLegacyEndpointContextSetter(stack, options); err != nil {
return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
return err
}
if err = addClientRequestID(stack); err != nil {
return err
}
if err = addComputeContentLength(stack); err != nil {
return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
return err
}
if err = addComputePayloadSHA256(stack); err != nil {
return err
}
if err = addRetry(stack, options); err != nil {
return err
}
if err = addRawResponseToMetadata(stack); err != nil {
return err
}
if err = addRecordResponseTiming(stack); err != nil {
return err
}
}

```

```

if err = addClientUserAgent(stack, options); err != nil {
    return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
    return
err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
    return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
    return err
}
if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
    return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
    return err
}
if err = addRecursionDetection(stack); err != nil {
    return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
    return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
    return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
    return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
    return err
}
return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
return &awsmiddleware.RegisterServiceMetadata{
    Region:    region,
    ServiceID: ServiceID,
}
}

```

```

OperationName:
"CreateLicense",
}
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
"context"
"fmt"
awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
"github.com/aws/aws-sdk-go-v2/service/grafana/types"
"github.com/aws/smithy-go/middleware"
smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
if params == nil {
params = &DisassociateLicenseInput{}
}

result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
if err != nil {
return nil, err
}

out := result.(*DisassociateLicenseOutput)
out.ResultMetadata = metadata
return out, nil
}

type DisassociateLicenseInput struct {

// The type of license to remove from the workspace.
//
// This member is required.
LicenseType types.LicenseType

//
The ID of the workspace to remove the Grafana Enterprise license from.
//
// This member is required.
WorkspaceId *string

```

```

noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

// A structure containing information about the workspace.
//
// This member is required.
Workspace *types.WorkspaceDescription

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
if err := stack.Serialize.Add(&setOperationInputMiddleware{ }, middleware.After); err != nil {
return err
}
err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{ }, middleware.After)
if err != nil {
return err
}
err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{ }, middleware.After)
if err != nil {
return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
err != nil {
return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addLegacyEndpointContextSetter(stack, options); err != nil {
return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
return err
}
if err = addClientRequestID(stack); err != nil {
return err
}
if err = addComputeContentLength(stack); err != nil {
return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
return err
}

```

```

}
if err = addComputePayloadSHA256(stack); err != nil {
    return err
}
if err = addRetry(stack, options); err != nil {
    return err
}
if err = addRawResponseToMetadata(stack); err != nil {
    return err
}
if err = addRecordResponseTiming(stack); err != nil {
    return err
}
if err = addClientUserAgent(stack, options); err != nil {
    return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil
{
    return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
    return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
    return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
    return err
}
if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
    return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
    return err
}
if err = addRecursionDetection(stack); err != nil {
    return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
    return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
    return err
}
}

```



```

if err = addRequestResponseLogging(stack, options); err != nil {
    return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
    return err
}
return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata
{
return &awsmiddleware.RegisterServiceMetadata{
    Region:    region,
    ServiceID: ServiceID,
    OperationName: "DisassociateLicense",
}
}
CheckoutLicense
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
Retry
RetryMetricsHeader
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody

```

ResponseErrorWrapper  
RequestIDRetriever  
OperationDeserializer  
AddTimeOffsetMiddleware  
RecordResponseTiming  
RequestResponseLogger  
DisassociateLicense  
Initialize stack step  
RegisterServiceMetadata  
legacyEndpointContextSetter  
SetLogger  
OperationInputValidation  
Serialize stack step  
setOperationInput  
ResolveEndpoint  
OperationSerializer  
Build stack step  
ClientRequestID  
ComputeContentLength  
UserAgent  
AddTimeOffsetMiddleware  
RecursionDetection  
Finalize stack step  
ResolveAuthScheme  
GetIdentity  
ResolveEndpointV2  
disableHTTPS  
ComputePayloadHash  
Retry  
RetryMetricsHeader  
setLegacyContextSigningOptions  
Signing  
Deserialize stack step  
AddRawResponseToMetadata  
ErrorCloseResponseBody  
CloseResponseBody  
ResponseErrorWrapper  
RequestIDRetriever  
OperationDeserializer  
AddTimeOffsetMiddleware  
RecordResponseTiming  
RequestResponseLogger  
CheckoutBorrowLicense  
Initialize stack step  
RegisterServiceMetadata  
legacyEndpointContextSetter  
SetLogger  
OperationInputValidation

```

Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
Finalize stack step
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  Retry
  RetryMetricsHeader
  setLegacyContextSigningOptions
  Signing
Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
  "context"
  "fmt"
  awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
  "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
  "github.com/aws/smithy-go/middleware"
  smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
  if params == nil {
    params = &ListReceivedLicensesInput{}

```

```

}

result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
if err != nil {
    return nil, err
}

out := result.(*ListReceivedLicensesOutput)
out.ResultMetadata = metadata
return out, nil
}

```

```

type ListReceivedLicensesInput struct {

```

```

    // Filters to scope the results. The following filters are supported:

```

```

    //

```

```

    // - ProductSKU

```

```

    //

```

```

    // - Status

```

```

    //

```

```

    //

```

```

    // - Fingerprint

```

```

    //

```

```

    // - IssuerName

```

```

    //

```

```

    // - Beneficiary

```

```

    Filters []types.Filter

```

```

    // Amazon Resource Names (ARNs) of the licenses.

```

```

    LicenseArns []string

```

```

    // Maximum number of results to return in a single call.

```

```

    MaxResults *int32

```

```

    // Token for the next set of results.

```

```

    NextToken *string

```

```

    noSmithyDocumentSerde

```

```

}

```

```

type ListReceivedLicensesOutput struct {

```

```

    // Received license details.

```

```

    Licenses []types.GrantedLicense

```

```

    // Token for the next set of results.

```

```

    NextToken *string

```

```

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
if err := stack.Serialize.Add(&setOperationInputMiddleware{ }, middleware.After); err != nil {
return err
}
err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{ }, middleware.After)
if err != nil {
return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{ },
middleware.After)
if err != nil {
return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addLegacyEndpointContextSetter(stack, options); err != nil {
return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
return err
}
if err = addClientRequestID(stack); err != nil {
return err
}
if err = addComputeContentLength(stack); err != nil {
return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
return err
}
if err = addComputePayloadSHA256(stack); err != nil {
return err
}
if err = addRetry(stack, options); err != nil {
return err
}
if err = addRawResponseToMetadata(stack); err != nil {
return err
}

```

```

}
if err = addRecordResponseTiming(stack); err != nil {
    return err
}
if err = addClientUserAgent(stack, options); err != nil {
    return err
}
if err
= smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
    return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
    return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
    return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
    return err
}
if err = addRecursionDetection(stack); err != nil {
    return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
    return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
    return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
    return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
    return err
}
return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region
string) *awsmiddleware.RegisterServiceMetadata {
return &awsmiddleware.RegisterServiceMetadata{

```

```

Region:    region,
ServiceID: ServiceID,
OperationName: "ListReceivedLicenses",
}
}
AssociateLicense
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
Retry
RetryMetricsHeader
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
    "context"
    "fmt"

```

```

awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
"github.com/aws/aws-sdk-go-v2/service/grafana/types"
"github.com/aws/smithy-go/middleware"
smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. To upgrade, you must use
// ENTERPRISE for the licenseType , and pass in a valid Grafana Labs token for the
// grafanaToken . Upgrading to Grafana Enterprise incurs additional fees. For more
// information, see [Upgrade a workspace to Grafana Enterprise].
//
// [Upgrade a workspace to Grafana Enterprise]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
    if params == nil {
        params = &AssociateLicenseInput{}
    }

    result, metadata, err := c.invokeOperation(ctx,
        "AssociateLicense", params, optFns, c.addOperationAssociateLicenseMiddlewares)
    if err != nil {
        return nil, err
    }

    out := result.(*AssociateLicenseOutput)
    out.ResultMetadata = metadata
    return out, nil
}

type AssociateLicenseInput struct {

    // The type of license to associate with the workspace.
    //
    // Amazon Managed Grafana workspaces no longer support Grafana Enterprise free
    // trials.
    //
    // This member is required.
    LicenseType types.LicenseType

    // The ID of the workspace to associate the license with.
    //
    // This member is required.
    WorkspaceId *string

    // A token from Grafana Labs that ties your Amazon Web Services account with a
    // Grafana Labs account. For more information, see [Link your account with Grafana Labs].
    //

```



```

// [Link your account with Grafana Labs]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html#AMG-workspace-register-enterprise
GrafanaToken *string

noSmithyDocumentSerde
}

type AssociateLicenseOutput
struct {

// A structure containing data about the workspace.
//
// This member is required.
Workspace *types.WorkspaceDescription

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
if err := stack.Serialize.Add(&setOperationInputMiddleware{ }, middleware.After); err != nil {
return err
}
err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{ }, middleware.After)
if err != nil {
return err
}
err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{ }, middleware.After)
if err != nil {
return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addLegacyEndpointContextSetter(stack, options); err != nil {
return err
}
if err = addSetLoggerMiddleware(stack,
options); err != nil {
return err
}
if err = addClientRequestID(stack); err != nil {
return err
}
if err = addComputeContentLength(stack); err != nil {

```

```

return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
return err
}
if err = addComputePayloadSHA256(stack); err != nil {
return err
}
if err = addRetry(stack, options); err != nil {
return err
}
if err = addRawResponseToMetadata(stack); err != nil {
return err
}
if err = addRecordResponseTiming(stack); err != nil {
return err
}
if err = addClientUserAgent(stack, options); err != nil {
return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
return err
}
if err = addUserAgentRetryMode(stack,
options); err != nil {
return err
}
if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
return err
}
if err = addRecursionDetection(stack); err != nil {
return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
return err
}

```

```

}
if err = addResponseErrorMiddleware(stack); err != nil {
    return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
    return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
    return err
}
return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
return &awsmiddleware.RegisterServiceMetadata{
    Region:    region,
    ServiceID: ServiceID,
    OperationName: "AssociateLicense",
}
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
    "context"
    "fmt"
    awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
    "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
    "github.com/aws/smithy-go/middleware"
    smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
    if params == nil {
        params = &GetLicenseInput{}
    }

    result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
    if err != nil {
        return nil, err
    }

    out := result.(*GetLicenseOutput)

```

```

out.ResultMetadata = metadata
return out, nil
}

type GetLicenseInput struct {

// Amazon Resource Name (ARN) of the license.
//
// This member is required.
LicenseArn *string

// License version.
Version *string

noSmithyDocumentSerde
}

type
GetLicenseOutput struct {

// License details.
License *types.License

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
if err := stack.Serialize.Add(&setOperationInputMiddleware{ }, middleware.After); err != nil {
return err
}
err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{ }, middleware.After)
if err != nil {
return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{ }, middleware.After)
if err != nil {
return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addLegacyEndpointContextSetter(stack, options); err != nil {
return err
}
}

```

```

if err = addSetLoggerMiddleware(stack, options); err != nil {
    return err
}
if err = addClientRequestID(stack); err
!= nil {
    return err
}
if err = addComputeContentLength(stack); err != nil {
    return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
    return err
}
if err = addComputePayloadSHA256(stack); err != nil {
    return err
}
if err = addRetry(stack, options); err != nil {
    return err
}
if err = addRawResponseToMetadata(stack); err != nil {
    return err
}
if err = addRecordResponseTiming(stack); err != nil {
    return err
}
if err = addClientUserAgent(stack, options); err != nil {
    return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
    return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
    return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
    return err
}
if err = addOpGetLicenseValidationMiddleware(stack);
err != nil {
    return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);

```

```

err != nil {
    return err
}
if err = addRecursionDetection(stack); err != nil {
    return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
    return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
    return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
    return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
    return err
}
return nil
}

```

```

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
return &awsmiddleware.RegisterServiceMetadata{
    Region:    region,
    ServiceID: ServiceID,
    OperationName: "GetLicense",
}
}

```

ListLicenses

```

Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS

```

ComputePayloadHash  
Retry  
RetryMetricsHeader  
setLegacyContextSigningOptions  
Signing  
Deserialize stack step  
AddRawResponseToMetadata  
ErrorCloseResponseBody  
CloseResponseBody  
ResponseErrorWrapper  
RequestIDRetriever  
OperationDeserializer  
AddTimeOffsetMiddleware  
RecordResponseTiming  
RequestResponseLogger

AWS SDK for Go

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```
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
      "type": "integer"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
      "type": "long"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerErrorException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
        }
      ]
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
    }
  }
}
```





```

    "smithy.api#documentation": "<p>One or more values for the name to filter by.</p>"
  }
},
"Operator": {
  "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
  "traits": {
    "smithy.api#documentation": "<p>An operator for filtering results.</p>"
  }
}
},
"traits": {
  "smithy.api#documentation": "<p>A filter object that is used to return more specific results from a describe operation.\n  Filters can be used to match a set of resources by specific criteria.</p>"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
  "type":
"list",
  "member": {
    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
  }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest"
  },
  "output": {
    "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerError"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Get details for a Bring Your Own License (BYOL) subscription that's registered to your account.</p>",

```

```

    "smithy.api#http": {
      "code": 200,
      "method": "POST",
      "uri": "/subscription/GetRegisteredSubscriptionProvider"
    },
    "smithy.api#idempotent": {}
  }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest": {
  "type": "structure",
  "members": {
    "SubscriptionProviderArn": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
      "traits": {
        "smithy.api#documentation":
"<p>The Amazon Resource Name (ARN) of the BYOL registration resource to get details for.</p>",
        "smithy.api#required": {}
      }
    },
    "traits": {
      "smithy.api#input": {}
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for the BYOL registration
resource specified in the request.</p>"
  }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse": {
  "type": "structure",
  "members": {
    "SubscriptionProviderArn": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
      "traits": {
        "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for the BYOL registration
resource specified in the request.</p>"
      }
    },
    "SubscriptionProviderSource": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
      "traits": {
        "smithy.api#documentation": "<p>The subscription provider for the BYOL registration resource
specified \n\t\t\tin the request.</p>"
      }
    },
    "SecretArn": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
      "traits": {
        "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the third-party access
secret stored in Secrets Manager for the BYOL \n\t\t\tregistration resource specified in the request.</p>"
      }
    }
  }
}

```



```

"smithy.api#documentation": "<p>Lists the Linux subscriptions service settings for your account.</p>",
"smithy.api#http": {
  "code": 200,
  "method": "POST",
  "uri": "/subscription/GetServiceSettings"
},
"smithy.api#idempotent": {}
},
"com.amazonaws.licenseanagerlinuxsubscriptions#GetServiceSettingsRequest": {
  "type": "structure",
  "members": {}
},
"com.amazonaws.licenseanagerlinuxsubscriptions#GetServiceSettingsResponse": {
  "type": "structure",
  "members": {
    "LinuxSubscriptionsDiscovery": {
      "target": "com.amazonaws.licenseanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
      "traits": {
        "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
      }
    },
    "LinuxSubscriptionsDiscoverySettings": {
      "target": "com.amazonaws.licenseanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
      "traits": {
        "smithy.api#documentation": "<p>Lists
the settings defined for Linux subscriptions discovery. The settings include if\n Organizations integration has
been enabled, and which Regions data will be aggregated from.</p>"
      }
    },
    "Status": {
      "target": "com.amazonaws.licenseanagerlinuxsubscriptions#Status",
      "traits": {
        "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being
applied.</p>"
      }
    },
    "StatusMessage": {
      "target": "com.amazonaws.licenseanagerlinuxsubscriptions#StringMap",
      "traits": {
        "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings
current status.</p>"
      }
    },
    "HomeRegions": {
      "target": "com.amazonaws.licenseanagerlinuxsubscriptions#StringList",

```

```

        "traits": {
            "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n    subscriptions.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
        "type": "structure",
        "members": {
            "AmiId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The AMI ID used to launch the instance.</p>"
                }
            },
            "InstanceID": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The instance ID of the resource.</p>"
                }
            },
            "InstanceType": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The instance type of the resource.</p>"
                }
            },
            "AccountID": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The account ID which owns the instance.</p>"
                }
            },
            "Status": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status of the instance.</p>"
                }
            },
            "Region": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The Region the instance is running in.</p>"
                }
            },
            "UsageOperation": {

```





```

    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider"
  },
  {
    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider"
  },
  {
    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
  },
  {
    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
  },
  {
    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"
  },
  {
    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders"
  },
  {
    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource"
  },
  {
    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider"
  },
  {
    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource"
  },
  {
    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource"
  },
  {
    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
  }
],
"traits": {
  "aws.api#service": {
    "sdkId": "License Manager Linux Subscriptions",
    "arnNamespace": "license-manager-linux-subscriptions",
    "cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
  },
  "aws.auth#sigv4": {
    "name": "license-manager-linux-subscriptions"
  },
  "aws.protocols#restJson1": {},
  "smithy.api#cors": {
    "additionalAllowedHeaders": [
      "*",
      "content-type",
      "x-amz-content-sha256",

```



```

    "x-amz-user-agent",
    "x-amzn-platform-id",
    "x-amzn-trace-id"
  ],
  "additionalExposedHeaders": [
    "x-amzn-errortype",
    "x-amzn-requestid",
    "x-amzn-trace-id"
  ]
},
"smithy.api#documentation": "<p>With License Manager,
you can discover and track your commercial Linux subscriptions on running Amazon EC2 instances.</p>",
"smithy.api#title": "AWS License Manager Linux Subscriptions",
"smithy.rules#endpointRuleSet": {
  "version": "1.0",
  "parameters": {
    "Region": {
      "builtIn": "AWS::Region",
      "required": false,
      "documentation": "The AWS region used to dispatch the request.",
      "type": "String"
    },
    "UseDualStack": {
      "builtIn": "AWS::UseDualStack",
      "required": true,
      "default": false,
      "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not
support dual-stack, dispatching the request MAY return an error.",
      "type": "Boolean"
    },
    "UseFIPS": {
      "builtIn": "AWS::UseFIPS",
      "required": true,
      "default": false,
      "documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the
configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
      "type": "Boolean"
    },
    "Endpoint": {
      "builtIn": "SDK::Endpoint",
      "required": false,
      "documentation": "Override the endpoint used to send this request",
      "type": "String"
    }
  },
  "rules": [
    {
      "conditions": [

```

```

    {
      "fn": "isSet",
      "argv": [
        {
          "ref": "Endpoint"
        }
      ]
    }
  ],
  "rules": [
    {
      "conditions": [
        {
          "fn": "booleanEquals",
          "argv": [
            {
              "ref": "UseFIPS"
            },
            true
          ]
        }
      ]
    }
  ],
  "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
  "type": "error"
},
{
  "conditions": [],
  "rules": [
    {
      "conditions": [
        {
          "fn": "booleanEquals",
          "argv": [
            {
              "ref": "UseDualStack"
            },
            true
          ]
        }
      ]
    }
  ]
},
  "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
  "type": "error"
},
{
  "conditions": [],
  "endpoint": {

```

```

        "url": {
            "ref": "Endpoint"
        },
        "properties": {},
        "headers": {}
    },
    "type": "endpoint"
}
],
"type": "tree"
}
],
"type": "tree"
},
{
    "conditions": [],
    "rules": [
        {
            "conditions": [
                {
                    "fn": "isSet",
                    "argv": [
                        {
                            "ref": "Region"
                        }
                    ]
                }
            ]
        }
    ],
    "rules": [
        {
            "conditions": [
                {
                    "fn": "aws.partition",
                    "argv": [
                        {
                            "ref": "Region"
                        }
                    ],
                    "assign": "PartitionResult"
                }
            ],
            "rules": [
                {
                    "conditions": [
                        {
                            "fn": "booleanEquals",

```

```

    "argv": [
      {
        "ref": "UseFIPS"
      },
      true
    ]
  },
  {
    "fn": "booleanEquals",
    "argv": [
      {
        "ref": "UseDualStack"
      },
      true
    ]
  }
],

"rules": [
  {
    "conditions": [
      {
        "fn": "booleanEquals",
        "argv": [
          true,
          {
            "fn": "getAttr",
            "argv": [
              {
                "ref": "PartitionResult"
              }
            ]
          }
        ]
      },
      {
        "fn": "booleanEquals",
        "argv": [
          true,
          {
            "fn": "getAttr",
            "argv": [
              {
                "ref": "PartitionResult"
              }
            ]
          }
        ]
      }
    ]
  }
]

```

```

        },
        "supportsDualStack"
    ]
}
]
}
],
"rules": [
    {
        "conditions": [],

"rules": [
    {
        "conditions": [],
        "endpoint": {
            "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
            "properties": {},
            "headers": {}
        },
        "type": "endpoint"
    }
],

"type": "tree"
    }
],
    "type": "tree"
},
{
    "conditions": [],
    "error": "FIPS and DualStack are enabled, but this partition does not support
one or both",
    "type": "error"
}
],
    "type": "tree"
},
{
    "conditions": [
        {
            "fn": "booleanEquals",
            "argv": [
                {
                    "ref": "UseFIPS"
                },
            ],
            true

```

```

    ]
  }
],
"rules": [
  {
    "conditions": [
      {
        "fn": "booleanEquals",
        "argv": [
          {
            "fn": "getAttr",
            "argv": [
              {
                "ref": "PartitionResult"
              },
              "supportsFIPS"
            ]
          },
          true
        ]
      }
    ]
  },
  {
    "rules": [
      {
        "conditions": [],
        "rules": [
          {
            "conditions": [],
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dnsSuffix}",
            },
            "headers": {}
          },
          {
            "type": "endpoint"
          }
        ],
        "type": "tree"
      }
    ],
    "type": "tree"
  },
  {
    "conditions": [],
    "error": "FIPS is enabled"
  }
]

```

but this partition does not support FIPS",

```
        "type": "error"
      }
    ],
    "type": "tree"
  },
  {
    "conditions": [
      {
        "fn": "booleanEquals",
        "argv": [
          {
            "ref": "UseDualStack"
          },
          true
        ]
      }
    ]
  },
  {
    "rules": [
      {
        "conditions": [
          {
            "fn": "booleanEquals",
            "argv": [
              true,
              {
                "fn": "getAttr",
                "argv": [
                  {
                    "ref": "PartitionResult"
                  },
                  "supportsDualStack"
                ]
              }
            ]
          }
        ]
      }
    ]
  },
  {
    "rules": [
      {
        "conditions": [],
        "rules": [
          {
            "conditions": [],
            "endpoint": {
              "url": "https://license-manager-linux-
```

```

subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
    "properties": {},
    "headers": {}
  },
  "type": "endpoint"
}
],
"type": "tree"
},
{
  "conditions": [],
  "error": "DualStack is enabled but this partition does not support DualStack",
  "type": "error"
}
],
"type": "tree"
},
{
  "conditions": [],
  "rules": [
    {
      "conditions": [],
      "endpoint": {
        "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",
        "properties": {},
        "headers": {}
      },
      "type": "endpoint"
    }
  ],
  "type": "tree"
}
],
"type": "tree"
},
{
  "conditions": [],
  "error": "Invalid Configuration: Missing Region",
  "type": "error"
}
}

```



```

    ],
    "type": "tree"
  }
]
},
"smithy.rules#endpointTests": {
  "testCases": [
    {
      "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"
        }
      }
    },
    {
      "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
        "UseDualStack": true
      }
    }
  ],
  {
    "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-linux-subscriptions-fips.us-east-1.amazonaws.com"
      }
    },
    {
      "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    }
  ],
  {
    "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-linux-subscriptions.us-east-1.api.aws"
      }
    },
    {
      "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": true
      }
    }
  ],

```

```

    {
      "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
        }
      }
    },
    {
      "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.cn-north-1.api.amazonwebservices.com.cn"
        }
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": true,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"
        }
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
        }
      }
    }
  ]

```

```

    },
    "params": {
      "Region": "cn-north-1",
      "UseFIPS": false,
      "UseDualStack": true
    }
  },
  {
    "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-linux-subscriptions.cn-north-1.amazonaws.com.cn"
      }
    },
    "params": {
      "Region": "cn-north-1",
      "UseFIPS": false,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.api.aws"
      }
    },
    "params": {
      "Region": "us-gov-east-1",
      "UseFIPS": true,
      "UseDualStack": true
    }
  },
  {
    "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.amazonaws.com"
      }
    },
    "params": {
      "Region": "us-gov-east-1",
      "UseFIPS": true,
      "UseDualStack": false
    }
  },

```

```

{
  "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-linux-subscriptions.us-gov-east-1.api.aws"
    }
  },
  "params": {
    "Region": "us-gov-east-1",
    "UseFIPS": false,
    "UseDualStack": true
  }
},
{

```

```

"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-linux-subscriptions.us-gov-east-1.amazonaws.com"
    }
  },
  "params": {
    "Region": "us-gov-east-1",
    "UseFIPS": false,
    "UseDualStack": false
  }
},
{
  "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
  "expect": {
    "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
  },
  "params": {
    "Region": "us-iso-east-1",
    "UseFIPS": true,
    "UseDualStack": true
  }
},
{
  "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
    }
  },
  "params": {
    "Region": "us-iso-east-1",

```

```

        "UseFIPS": true,
        "UseDualStack": false
    }
},
{
    "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
enabled",
    "expect": {
        "error": "DualStack is enabled but this partition does not support DualStack"
    },
    "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": false,
        "UseDualStack": true
    }
},
{
    "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager-linux-subscriptions.us-iso-east-1.c2s.ic.gov"
        }
    },
    "params": {
        "Region": "us-iso-east-1",
        "UseFIPS":
false,
        "UseDualStack": false
    }
},
{
    "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
    "expect": {
        "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
    },
    "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": true,
        "UseDualStack": true
    }
},
{
    "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
        }
    },
},

```

```

    "params": {
      "Region": "us-isob-east-1",
      "UseFIPS": true,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
    "expect": {
      "error": "DualStack is enabled but this partition does not support DualStack"
    },
    "params": {
      "Region": "us-isob-east-1",
      "UseFIPS": false,
      "UseDualStack": true
    }
  },
  {
    "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-linux-subscriptions.us-isob-east-1.sc2s.gov.gov"
      }
    },
    "params": {
      "Region": "us-isob-east-1",
      "UseFIPS": false,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
    "expect": {
      "endpoint": {
        "url": "https://example.com"
      }
    }
  },
  {
    "params": {
      "Region": "us-east-1",
      "UseFIPS": false,
      "UseDualStack": false,
      "Endpoint": "https://example.com"
    }
  },
  {
    "documentation": "For custom endpoint with region not set and fips disabled and dualstack

```

```

disabled",
    "expect": {
      "endpoint": {
        "url": "https://example.com"
      }
    },
    "params": {
      "UseFIPS": false,
      "UseDualStack": false,
      "Endpoint": "https://example.com"
    }
  },
  {
    "documentation": "For custom endpoint with fips enabled and dualstack disabled",
    "expect": {
      "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
    },
    "params": {
      "Region": "us-east-1",
      "UseFIPS": true,
      "UseDualStack": false,
      "Endpoint": "https://example.com"
    }
  },
  {
    "documentation": "For custom endpoint with fips disabled and dualstack enabled",
    "expect": {
      "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
    },
    "params": {
      "Region": "us-east-1",
      "UseFIPS": false,
      "UseDualStack": true,
      "Endpoint": "https://example.com"
    }
  },
  {
    "documentation": "Missing region",
    "expect": {
      "error": "Invalid Configuration: Missing Region"
    }
  }
],
"version": "1.0"
}
}

```

```

},
"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
  "type": "string",
  "traits": {
    "smithy.api#enum": [
      {
        "name": "Enabled",
        "value": "Enabled",
        "documentation": "Enabled LinuxSubscriptionsDiscovery"
      },
      {
        "name": "Disabled",
        "value": "Disabled",
        "documentation": "Disabled LinuxSubscriptionsDiscovery"
      }
    ]
  }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings": {
  "type": "structure",
  "members": {
    "SourceRegions": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
      "traits": {
        "smithy.api#documentation": "<p>The Regions in which to discover data for Linux
subscriptions.</p>",
        "smithy.api#required": {}
      }
    },
    "OrganizationIntegration": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
      "traits": {
        "smithy.api#documentation":
"<p>Details if you have enabled resource discovery across your accounts in Organizations.</p>",
        "smithy.api#required": {}
      }
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Lists the settings defined for discovering Linux subscriptions.</p>"
  }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
  },

```





```

<code>InstanceType</code>\n      </p>\n      </li>\n      <li>\n      <p>\n
<code>ProductCode</code>\n      </p>\n      </li>\n      <li>\n      <p>\n
<code>Region</code>\n      </p>\n      </li>\n      <li>\n      <p>\n
<code>Status</code>\n      </p>\n      </li>\n      <li>\n      <p>\n
<code>UsageOperation</code>\n      </p>\n      </li>\n    </ul>\n    <p>For each filter, you can use
one of the following <code>Operator</code>
values to \n \t\define the behavior of the filter:</p>\n    <ul>\n      <li>\n      <p>\n
<code>contains</code>\n      </p>\n      </li>\n      <li>\n      <p>\n
<code>equals</code>\n      </p>\n      </li>\n      <li>\n      <p>\n
<code>Notequal</code>\n      </p>\n      </li>\n    </ul>"
  }
},
"MaxResults": {
  "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
  "traits": {
    "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
  }
},
"NextToken": {
  "target": "smithy.api#String",
  "traits": {
    "smithy.api#documentation": "<p>A token to specify where to
start paginating. This \n\tis the nextToken from a previously truncated response.</p>",
    "smithy.api#length": {
      "min": 1,
      "max": 16384
    }
  }
},
"traits": {
  "smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if
parameters in request increases."
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
  "type": "structure",
  "members": {
    "Instances": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
      "traits": {
        "smithy.api#documentation": "<p>An array that contains instance objects.</p>"
      }
    },
    "NextToken": {
      "target": "smithy.api#String",
      "traits": {

```

"smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\field isn't empty, there are additional elements that the service hasn't \n\included in this request. Use this token with the next request to retrieve \n\additional objects.</p>"

```
    }
  }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerErrorException"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Lists the Linux subscriptions that have been discovered. If you have linked your\n  organization, the returned results will include data aggregated across your accounts in\n Organizations.</p>",
    "smithy.api#http": {
      "code": 200,
      "method": "POST",
      "uri": "/subscription/ListLinuxSubscriptions"
    },
    "smithy.api#idempotent": {},
    "smithy.api#paginated": {
      "inputToken": "NextToken",
      "outputToken": "NextToken",
      "pageSize": "MaxResults",
    }
  }
},
"items": "Subscriptions"
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
  "type": "structure",
  "members": {
```

```

    "Filters": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
      "traits": {
        "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those
that match one or
more sets of key-value pairs that you specify. For example, you can filter by the name of
<code>Subscription</code> with an optional operator to see subscriptions that match,\n
partially match, or don't
match a certain subscription's name.</p>\n
<p>The valid names for this filter are:</p>\n
<ul>\n
<li>\n
<p>\n
<code>Subscription</code>\n
</p>\n
</li>\n
</ul>\n
<p>The
valid Operators for this filter are:</p>\n
<ul>\n
<li>\n
<p>\n
<code>contains</code>\n
</p>\n
</li>\n
<li>\n
<p>\n
<code>equals</code>\n
</p>\n
</li>\n
<li>\n
<p>\n
<code>NotEqual</code>\n
</p>\n
</li>\n
</ul>"
      }
    },
    "MaxResults": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
      "traits": {
        "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
      }
    },
    "NextToken": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis
the nextToken from a previously truncated response.</p>",
        "smithy.api#length": {
          "min": 1,
          "max": 16384
        }
      }
    },
    "traits": {
      "smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if
parameters in request increases."
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
    "type": "structure",
    "members": {
      "Subscriptions": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
        "traits": {
          "smithy.api#documentation": "<p>An array that contains subscription objects.</p>"
        }
      }
    },
    "NextToken": {

```

```

    "target": "smithy.api#String",
    "traits": {
      "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\field
isn't empty, there are additional elements that the service hasn't \n\included in this request. Use this token with the
next request to retrieve \n\additional objects.</p>"
    }
  }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders": {
  "type": "operation",
  "input": {
    "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest"
  },
  "output": {
    "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerError"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>List Bring Your Own License (BYOL) subscription registration
resources for your account.</p>",
    "smithy.api#http": {
      "code": 200,
      "method": "POST",
      "uri": "/subscription/ListRegisteredSubscriptionProviders"
    },
    "smithy.api#idempotent": {},
    "smithy.api#paginated": {
      "inputToken": "NextToken",
      "outputToken": "NextToken",
      "pageSize": "MaxResults",
      "items": "RegisteredSubscriptionProviders"
    }
  }
}

```



"smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\field isn't empty, there are additional elements that the service hasn't \n\included in this request. Use this token with the next request to retrieve \n\additional objects.</p>"

```
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerErrorException"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>List the metadata tags that are assigned to the \n\t\t\tspecified Amazon Web Services resource.</p>",
    "smithy.api#http": {
      "method": "GET",
      "uri": "/tags/{resourceArn}"
    },
    "smithy.api#readonly": {}
  }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest": {
  "type": "structure",
  "members": {
    "resourceArn": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
      "traits": {
        "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource for which to list metadata tags.</p>",

```

```

        "smithy.api#httpLabel": {},
        "smithy.api#required": {}
    }
}
},
"traits": {
    "smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse": {
    "type": "structure",
    "members": {
        "tags": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
            "traits": {
                "smithy.api#documentation": "<p>The metadata tags for the requested resource.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
    "type": "string",
    "traits": {
        "smithy.api#enum": [
            {
                "name": "EQUAL",
                "value": "Equal",
                "documentation": "Equal operator"
            },
            {
                "name": "NOT_EQUAL",
                "value": "NotEqual",
                "documentation": "Not equal operator"
            },
            {
                "name": "CONTAINS",
                "value": "Contains",
                "documentation": "Contains operator"
            }
        ],
        "smithy.api#length": {
            "min": 1,
            "max": 20
        }
    }
}

```



```

    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration":
    {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "Enabled",
                    "value": "Enabled",
                    "documentation": "Enabled OrganizationIntegration"
                },
                {
                    "name": "Disabled",
                    "value": "Disabled",
                    "documentation": "Disabled OrganizationIntegration"
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerError"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Register the supported third-party subscription provider for your Bring Your Own License (BYOL) subscription.</p>",
            "smithy.api#http": {

```



```

    },
    "SubscriptionProviderArn": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Linux subscription
provider resource that you registered.</p>"
      }
    },
    "SubscriptionProviderStatus": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
      "traits": {
        "smithy.api#documentation": "<p>Indicates the status of the registration action for the Linux
subscription provider \n\t\t\tthat you requested.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider":
{
  "type": "structure",
  "members": {
    "SubscriptionProviderArn": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
      "traits": {
        "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Linux subscription
provider resource that you registered.</p>"
      }
    },
    "SubscriptionProviderSource": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
      "traits": {
        "smithy.api#documentation": "<p>A supported third-party Linux subscription provider. License
Manager currently supports \n\t\t\tRed Hat subscriptions.</p>"
      }
    },
    "SecretArn": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
      "traits": {
        "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Secrets Manager secret
that stores your registered Linux subscription provider \n\t\t\taccess token. For RHEL account subscriptions, this is
the offline token.</p>"
      }
    },
    "SubscriptionProviderStatus": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",

```

```

    "traits": {
      "smithy.api#documentation": "<p>Indicates the status of your registered Linux subscription provider
access token \n\t\t\tfrom the last time License Manager retrieved subscription data. For RHEL account subscriptions,
\n\t\t\tthis is the status of the offline token.</p>"
    }
  },
  "SubscriptionProviderStatusMessage": {
    "target": "smithy.api#String",
    "traits":
  {
    "smithy.api#documentation": "<p>A detailed message that's associated with your BYOL subscription
\n\t\t\tprovider token status.</p>"
  }
  },
  "LastSuccessfulDataRetrievalTime": {
    "target": "smithy.api#String",
    "traits": {
      "smithy.api#documentation": "<p>The timestamp from the last time that License Manager accessed
third-party subscription data \n\t\t\tfor your account from your registered Linux subscription provider.</p>"
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>A third-party provider for operating system (OS) platform software and
license \n\t\t\tsubscriptions, such as Red Hat. When you register a third-party Linux subscription \n\t\t\tprovider,
License Manager can get subscription data from the registered provider.</p>"
  }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList":
{
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider"
  }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException": {
  "type": "structure",
  "members": {
    "message": {
      "target": "smithy.api#String"
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Unable to find the requested Amazon Web Services resource.</p>",
    "smithy.api#error": "client"
  }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn": {

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    "type": "string",
    "traits": {
      "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-\\.]{0,63}:secret:[^/]{1,1023}$"
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
    "type": "string",
    "traits": {
      "smithy.api#enum": [
        {
          "name": "InProgress",
          "value": "InProgress",
          "documentation": "InProgress status"
        },
        {
          "name": "Completed",
          "value": "Completed",
          "documentation": "Completed status"
        },
        {
          "name": "Successful",
          "value": "Successful",
          "documentation": "Successful status"
        },
        {
          "name": "Failed",
          "value": "Failed",
          "documentation": "Failed status"
        }
      ]
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
    "type": "list",
    "member": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#length": {
          "min": 1,
          "max": 100
        }
      }
    }
  },
  "traits": {
    "smithy.api#length": {

```

```

        "min": 1,
        "max": 100
    },
    "smithy.api#uniqueItems": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
    "type": "map",
    "key": {
        "target": "smithy.api#String"
    },
    "value": {
        "target": "smithy.api#String"
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The name of the subscription.</p>"
            }
        },
        "Type": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The type of subscription. The type can be subscription-included with Amazon EC2, Bring Your Own\n    Subscription model (BYOS), or from the Amazon Web Services Marketplace. Certain subscriptions may use licensing from the\n    Amazon Web Services Marketplace as well as OS licensing from Amazon EC2 or BYOS.</p>"
            }
        },
        "InstanceCount": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
            "traits": {
                "smithy.api#documentation": "<p>The total amount of running instances using this subscription.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>An object which details a discovered Linux subscription.</p>"
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
    "type": "list",

```

```

    "member": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn": {
    "type": "string",
    "traits": {
      "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,510}/[a-z0-9-\\.]{1,510}$"
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource": {
    "type": "string",
    "traits": {
      "smithy.api#enum": [
        {
          "name": "RedHat",
          "value": "RedHat",
          "documentation": "RedHat subscription provider namespace"
        }
      ]
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList": {
    "type": "list",
    "member": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource"
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus": {
    "type": "string",
    "traits": {
      "smithy.api#enum": [
        {
          "name": "ACTIVE",
          "value": "ACTIVE",
          "documentation": "ACTIVE status"
        },
        {
          "name": "INVALID",
          "value": "INVALID",
          "documentation": "INVALID status"
        }
      ]
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatusList": {
    "type": "list",
    "member": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus"
    }
  }
}

```

```

        "documentation": "PENDING status"
    }
]
},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList": {
    "type": "list",
    "member": {
        "target": "smithy.api#String"
    },
    "traits": {
        "smithy.api#length": {
            "min": 0,
            "max": 50
        },
        "smithy.api#sensitive": {}
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagResource": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerError"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Add metadata tags to the specified Amazon Web Services resource.</p>",
        "smithy.api#http": {
            "method": "PUT",
            "uri": "/tags/{resourceArn}"
        },
        "smithy.api#idempotent": {}
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest": {

```





```

    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation":
        "<p>The request was denied due to request throttling.</p>",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerError"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Remove one or more metadata tag from the specified Amazon Web
Services resource.</p>",
        "smithy.api#http": {
          "method": "DELETE",
          "uri": "/tags/{resourceArn}"
        },
        "smithy.api#idempotent": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest": {
      "type": "structure",
      "members": {
        "resourceArn": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to remove the metadata tags from.</p>",

```

```

        "smithy.api#httpLabel": {},
        "smithy.api#required": {}
    }
},
"tagKeys": {
    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList",
    "traits": {

        "smithy.api#documentation": "<p>A list of metadata tag keys to remove from the requested
\n\t\t\tresource.</p>",
        "smithy.api#httpQuery": "tagKeys",
        "smithy.api#required": {}
    }
},
"traits": {
    "smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse": {
    "type": "structure",
    "members": {},
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"
    }
},
"errors": [
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerError"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
    }
],
"traits": {
    "smithy.api#documentation": "<p>Updates the service settings for Linux subscriptions.</p>",

```

```

    "smithy.api#http": {
      "code": 200,
      "method": "POST",
      "uri": "/subscription/UpdateServiceSettings"
    },
    "smithy.api#idempotent": {}
  }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest": {
  "type": "structure",
  "members": {
    "LinuxSubscriptionsDiscovery": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
      "traits": {
        "smithy.api#documentation": "<p>Describes if the discovery of Linux subscriptions is enabled.</p>",
        "smithy.api#required": {}
      }
    },
    "LinuxSubscriptionsDiscoverySettings": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
      "traits": {
        "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The settings include if Organizations\n  integration has been enabled, and which Regions data will be aggregated from.</p>",
        "smithy.api#required": {}
      }
    },
    "AllowUpdate": {
      "target":
"smithy.api#Boolean",
      "traits": {
        "smithy.api#documentation": "<p>Describes if updates are allowed to the service settings for Linux subscriptions. If you\n  allow updates, you can aggregate Linux subscription data in more than one home Region.</p>"
      }
    }
  }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
  "type": "structure",
  "members": {
    "LinuxSubscriptionsDiscovery": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
      "traits": {
        "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
      }
    },
    "LinuxSubscriptionsDiscoverySettings": {

```

```

        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
        "traits": {
            "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The
settings include if Organizations\n    integration has been enabled, and which Regions data will be aggregated
from.</p>"
        }
    },
    "Status": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
        "traits": {
            "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being
applied.</p>"
        }
    },
    "StatusMessage": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
        "traits": {
            "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings
current status.</p>"
        }
    },
    "HomeRegions": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
        "traits": {
            "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n    subscriptions.</p>"
        }
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
    "type": "structure",
    "members": {
        "message": {
            "target": "smithy.api#String"
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",
        "smithy.api#error": "client"
    }
}
}
}

```

// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

```

import (
    "context"
    "fmt"
    awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
    "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
    "github.com/aws/smithy-go/middleware"
    smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
    if params == nil {
        params = &DeleteLicenseInput{}
    }

    result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
    if err != nil {
        return nil, err
    }

    out := result.(*DeleteLicenseOutput)
    out.ResultMetadata = metadata
    return out, nil
}

type DeleteLicenseInput struct {

    // Amazon Resource Name (ARN) of the license.
    //
    // This member is required.
    LicenseArn *string

    // Current version of the license.
    //
    // This member is required.
    SourceVersion
    *string

    noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

    // Date when the license is deleted.
    DeletionDate *string

```

```

// License status.
Status types.LicenseDeletionStatus

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
    if err := stack.Serialize.Add(&setOperationInputMiddleware{ }, middleware.After); err != nil {
        return err
    }
    err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{ }, middleware.After)
    if err != nil {
        return err
    }
    err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{ }, middleware.After)
    if err != nil {
        return err
    }
    if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
        return fmt.Errorf("add protocol finalizers: %v", err)
    }

    if err = addLegacyEndpointContextSetter(stack, options); err !=
    nil {
        return err
    }
    if err = addSetLoggerMiddleware(stack, options); err != nil {
        return err
    }
    if err = addClientRequestID(stack); err != nil {
        return err
    }
    if err = addComputeContentLength(stack); err != nil {
        return err
    }
    if err = addResolveEndpointMiddleware(stack, options); err != nil {
        return err
    }
    if err = addComputePayloadSHA256(stack); err != nil {
        return err
    }
    if err = addRetry(stack, options); err != nil {
        return err
    }
}

```

```

if err = addRawResponseToMetadata(stack); err != nil {
    return err
}
if err = addRecordResponseTiming(stack); err != nil {
    return err
}
if err = addClientUserAgent(stack, options); err != nil {
    return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
    return err
}
if err = addTimeOffsetBuild(stack, c); err != nil
{
    return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
    return err
}
if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
    return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
    return err
}
if err = addRecursionDetection(stack); err != nil {
    return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
    return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
    return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
    return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
    return err
}
return nil

```



```

}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
return &awsmiddleware.RegisterServiceMetadata{
    Region:    region,
    ServiceID: ServiceID,
    OperationName: "DeleteLicense",
}
}
DeleteLicense
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
Retry
RetryMetricsHeader
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
GetLicense
Initialize stack step
RegisterServiceMetadata

```

```

legacyEndpointContextSetter
SetLogger
OperationInputValidation
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
Retry
RetryMetricsHeader
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
    "context"
    "fmt"
    awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
    "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
    "github.com/aws/smithy-go/middleware"
    smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns

```

```

...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
if params == nil {
    params = &CheckoutBorrowLicenseInput{}
}

result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
if err != nil {
    return nil, err
}

out := result.(*CheckoutBorrowLicenseOutput)
out.ResultMetadata = metadata
return out, nil
}

type CheckoutBorrowLicenseInput struct {

// Unique, case-sensitive identifier that you provide to ensure the idempotency of
//
the request.
//
// This member is required.
ClientToken *string

// Digital signature method. The possible value is JSON Web Signature (JWS)
// algorithm PS384. For more information, see [RFC 7518 Digital Signature with RSASSA-PSS].
//
// [RFC 7518 Digital Signature with RSASSA-PSS]: https://tools.ietf.org/html/rfc7518#section-3.5
//
// This member is required.
DigitalSignatureMethod types.DigitalSignatureMethod

// License entitlements. Partial checkouts are not supported.
//
// This member is required.
Entitlements []types.EntitlementData

// Amazon Resource Name (ARN) of the license. The license must use the borrow
// consumption configuration.
//
// This member is required.
LicenseArn *string

// Information about constraints.
CheckoutMetadata []types.Metadata

// Node ID.

```

```

NodeId *string

noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

// Information about constraints.
CheckoutMetadata []types.Metadata

// Allowed license entitlements.
EntitlementsAllowed
[]types.EntitlementData

// Date and time at which the license checkout expires.
Expiration *string

// Date and time at which the license checkout is issued.
IssuedAt *string

// Amazon Resource Name (ARN) of the license.
LicenseArn *string

// License consumption token.
LicenseConsumptionToken *string

// Node ID.
NodeId *string

// Signed token.
SignedToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
if err := stack.Serialize.Add(&setOperationInputMiddleware{ }, middleware.After); err != nil {
return err
}
err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{ }, middleware.After)
if err != nil {
return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{ }, middleware.After)

```

```

if err != nil {
    return
    err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
    return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addLegacyEndpointContextSetter(stack, options); err != nil {
    return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
    return err
}
if err = addClientRequestID(stack); err != nil {
    return err
}
if err = addComputeContentLength(stack); err != nil {
    return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
    return err
}
if err = addComputePayloadSHA256(stack); err != nil {
    return err
}
if err = addRetry(stack, options); err != nil {
    return err
}
if err = addRawResponseToMetadata(stack); err != nil {
    return err
}
if err = addRecordResponseTiming(stack); err != nil {
    return err
}
if err = addClientUserAgent(stack, options); err != nil {
    return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
    return
    err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
    return err
}

```

```

if err = addTimeOffsetBuild(stack, c); err != nil {
    return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
    return err
}
if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
    return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
    return err
}
if err = addRecursionDetection(stack); err != nil {
    return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
    return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
    return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
    return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
    return err
}
return nil
}

```

```

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region
string) *awsmiddleware.RegisterServiceMetadata {
return &awsmiddleware.RegisterServiceMetadata{
    Region:    region,
    ServiceID: ServiceID,
    OperationName: "CheckoutBorrowLicense",
}
}

```

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// Code generated by smithy-go-codegen DO NOT EDIT.

```
package licensemanager
```

```
import (  
    "context"  
    "fmt"  
    awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"  
    "github.com/aws/smithy-go/middleware"  
    smithyhttp "github.com/aws/smithy-go/transport/http"  
)  
  
// Checks in the specified license. Check in a license when it is no longer in use.  
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))  
(*CheckInLicenseOutput, error) {  
    if params == nil {  
        params = &CheckInLicenseInput{}  
    }  
  
    result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,  
c.addOperationCheckInLicenseMiddlewares)  
    if err != nil {  
        return nil, err  
    }  
  
    out := result.(*CheckInLicenseOutput)  
    out.ResultMetadata = metadata  
    return out, nil  
}
```

```

type CheckInLicenseInput struct {

    // License consumption token.
    //
    // This member is required.
    LicenseConsumptionToken *string

    // License beneficiary.
    Beneficiary *string

    noSmithyDocumentSerde
}

type
CheckInLicenseOutput struct {
    // Metadata pertaining to the operation's result.
    ResultMetadata middleware.Metadata

    noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
    if err := stack.Serialize.Add(&setOperationInputMiddleware{ }, middleware.After); err != nil {
        return err
    }
    err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{ }, middleware.After)
    if err != nil {
        return err
    }
    err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{ }, middleware.After)
    if err != nil {
        return err
    }
    if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
        return fmt.Errorf("add protocol finalizers: %v", err)
    }

    if err = addLegacyEndpointContextSetter(stack, options); err != nil {
        return err
    }
    if err = addSetLoggerMiddleware(stack, options); err != nil {
        return err
    }
    if err = addClientRequestID(stack); err != nil {
        return err
    }
    if

```



```

err = addComputeContentLength(stack); err != nil {
    return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
    return err
}
if err = addComputePayloadSHA256(stack); err != nil {
    return err
}
if err = addRetry(stack, options); err != nil {
    return err
}
if err = addRawResponseToMetadata(stack); err != nil {
    return err
}
if err = addRecordResponseTiming(stack); err != nil {
    return err
}
if err = addClientUserAgent(stack, options); err != nil {
    return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
    return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
    return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
    return err
}
if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil
{
    return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
    return err
}
if err = addRecursionDetection(stack); err != nil {
    return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {

```

```

return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
return err
}
return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
return &awsmiddleware.RegisterServiceMetadata{
Region:    region,
ServiceID: ServiceID,
OperationName: "CheckInLicense",
}
}

```

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// Code generated by smithy-go-codegen DO NOT EDIT.

```
package licensemanager
```

```
import (  
    "context"  
    "fmt"  
    awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
```

```

"github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
"github.com/aws/smithy-go/middleware"
smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
    if params == nil {
        params = &ListLicensesInput{}
    }

    result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
    if err != nil {
        return nil, err
    }

    out := result.(*ListLicensesOutput)
    out.ResultMetadata = metadata
    return out, nil
}

type ListLicensesInput struct {

    // Filters to scope the results. The following filters are supported:
    //
    // - Beneficiary
    //
    // - ProductSKU
    //
    // - Fingerprint
    //
    // - Status
    Filters
    []types.Filter

    // Amazon Resource Names (ARNs) of the licenses.
    LicenseArns []string

    // Maximum number of results to return in a single call.
    MaxResults *int32

    // Token for the next set of results.
    NextToken *string

    noSmithyDocumentSerde
}

```

```

type ListLicensesOutput struct {

    // License details.
    Licenses []types.License

    // Token for the next set of results.
    NextToken *string

    // Metadata pertaining to the operation's result.
    ResultMetadata middleware.Metadata

    noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
    if err := stack.Serialize.Add(&setOperationInputMiddleware{ }, middleware.After); err != nil {
        return err
    }
    err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{ }, middleware.After)
    if err != nil {
        return err
    }
    err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{ }, middleware.After)
    if err != nil {
        return err
    }
    if err := addProtocolFinalizerMiddlewares(stack,
        options, "ListLicenses"); err != nil {
        return fmt.Errorf("add protocol finalizers: %v", err)
    }

    if err = addLegacyEndpointContextSetter(stack, options); err != nil {
        return err
    }
    if err = addSetLoggerMiddleware(stack, options); err != nil {
        return err
    }
    if err = addClientRequestID(stack); err != nil {
        return err
    }
    if err = addComputeContentLength(stack); err != nil {
        return err
    }
    if err = addResolveEndpointMiddleware(stack, options); err != nil {
        return err
    }
    if err = addComputePayloadSHA256(stack); err != nil {

```



```

return err
}
if err = addRetry(stack, options); err != nil {
return err
}
if err = addRawResponseToMetadata(stack); err != nil {
return err
}
if err = addRecordResponseTiming(stack); err != nil {
return err
}
if err = addClientUserAgent(stack, options); err != nil {
return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack);
err != nil {
return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
return err
}
if err = addRecursionDetection(stack); err != nil {
return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
return err
}

```

```

}
return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
return &awsmiddleware.RegisterServiceMetadata{
Region:    region,
ServiceID:
    ServiceID,
OperationName: "ListLicenses",
}
}
CheckInLicense
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
Retry
RetryMetricsHeader
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger

```

```

{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licenseanagerusersubscriptions#AccessDeniedException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>You don't have sufficient access to perform this action.</p>",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licenseanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
      "type": "structure",
      "members": {
        "DirectoryId": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The directory ID for an Active Directory identity provider.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation":
        "<p>Details about an Active Directory identity provider.</p>"
      }
    },
    "com.amazonaws.licenseanagerusersubscriptions#AssociateUser": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licenseanagerusersubscriptions#AssociateUserRequest"
      },
      "output": {
        "target": "com.amazonaws.licenseanagerusersubscriptions#AssociateUserResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licenseanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licenseanagerusersubscriptions#ConflictException"
        },
        {
          "target": "com.amazonaws.licenseanagerusersubscriptions#InternalServerError"
        }
      ]
    }
  }
}

```

```

    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ResourceNotFoundException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ServiceQuotaExceededException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ThrottlingException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Associates the user to an EC2 instance to utilize user-based
subscriptions.</p>\n    <note>\n      <p>Your estimated bill for charges on the number of users and related
costs will take 48\n      hours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing
status) in Amazon Web Services Billing. For more information, see <a
href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n
monthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n    </note>",
    "smithy.api#http": {
      "code": 200,
      "method": "POST",
      "uri": "/user/AssociateUser"
    },
    "smithy.api#idempotent": {}
  }
},
"com.amazonaws.licenseanagerusersubscriptions#AssociateUserRequest": {
  "type": "structure",
  "members": {
    "Username": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
        "smithy.api#required": {}
      }
    },
    "InstanceId": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The ID of the
EC2 instance, which provides user-based subscriptions.</p>",
        "smithy.api#required": {}
      }
    },
    "IdentityProvider": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#IdentityProvider",

```

```

    "traits": {
      "smithy.api#documentation": "<p>The identity provider of the user.</p>",
      "smithy.api#required": {}
    }
  },
  "Domain": {
    "target": "smithy.api#String",
    "traits": {
      "smithy.api#documentation": "<p>The domain name of the user.</p>"
    }
  }
},
"com.amazonaws.licenseanagerusersubscriptions#AssociateUserResponse": {
  "type": "structure",
  "members": {
    "InstanceUserSummary": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#InstanceUserSummary",
      "traits": {
        "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
        "smithy.api#required": {}
      }
    }
  }
},
"com.amazonaws.licenseanagerusersubscriptions#BoxInteger": {
  "type": "integer"
},
"com.amazonaws.licenseanagerusersubscriptions#ConflictException": {
  "type": "structure",
  "members": {
    "message": {
      "target": "smithy.api#String"
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>The request couldn't be completed because it conflicted with the current state of the\n resource.</p>",
    "smithy.api#error": "server"
  }
},
"com.amazonaws.licenseanagerusersubscriptions#DeregisterIdentityProvider":
{
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licenseanagerusersubscriptions#DeregisterIdentityProviderRequest"
  },
  "output": {

```

```

    "target": "com.amazonaws.licenseanagerusersubscriptions#DeregisterIdentityProviderResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ConflictException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#InternalServerError"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ResourceNotFoundException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ServiceQuotaExceededException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ThrottlingException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Deregisters the identity provider from providing user-based
subscriptions.</p>",
    "smithy.api#http": {
      "code": 200,
      "method": "POST",
      "uri": "/identity-provider/DeregisterIdentityProvider"
    },
    "smithy.api#idempotent": {}
  }
},
"com.amazonaws.licenseanagerusersubscriptions#DeregisterIdentityProviderRequest": {
  "type": "structure",
  "members": {
    "IdentityProvider": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#IdentityProvider",
      "traits": {
        "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
        "smithy.api#required": {}
      }
    }
  },
  "Product": {
    "target": "smithy.api#String",

```

```

        "traits": {
            "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
            "smithy.api#required": {}
        }
    },
    "com.amazonaws.licenseanagerusersubscriptions#DeregisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
            "IdentityProviderSummary": {
                "target": "com.amazonaws.licenseanagerusersubscriptions#IdentityProviderSummary",
                "traits": {
                    "smithy.api#documentation":
"<p>Metadata that describes the results of an identity provider operation.</p>",
                    "smithy.api#required": {}
                }
            }
        }
    },
    "com.amazonaws.licenseanagerusersubscriptions#DisassociateUser": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licenseanagerusersubscriptions#DisassociateUserRequest"
        },
        "output": {
            "target": "com.amazonaws.licenseanagerusersubscriptions#DisassociateUserResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licenseanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licenseanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licenseanagerusersubscriptions#InternalServerErrorException"
            },
            {
                "target": "com.amazonaws.licenseanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licenseanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licenseanagerusersubscriptions#ThrottlingException"
            },
            {

```

```

        "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
    }
],
"traits": {
    "smithy.api#documentation": "<p>Disassociates the user from an EC2 instance providing user-based
subscriptions.</p>",
    "smithy.api#http": {
        "code": 200,
        "method": "POST",
        "uri": "/user/DisassociateUser"
    },
    "smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest": {
    "type": "structure",
    "members": {
        "Username": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
                "smithy.api#required": {}
            }
        },
        "InstanceId": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
                "smithy.api#required": {}
            }
        },
        "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
                "smithy.api#documentation":
"<p>An object that specifies details for the identity provider.</p>",
                "smithy.api#required": {}
            }
        },
        "Domain": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The domain name of the user.</p>"
            }
        }
    }
}
}

```



```

    },
    "com.amazonaws.licenseanagerusersubscriptions#DisassociateUserResponse": {
      "type": "structure",
      "members": {
        "InstanceUserSummary": {
          "target": "com.amazonaws.licenseanagerusersubscriptions#InstanceUserSummary",
          "traits": {
            "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
            "smithy.api#required": {}
          }
        }
      }
    },
    "com.amazonaws.licenseanagerusersubscriptions#Filter": {
      "type": "structure",
      "members": {
        "Attribute": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The name of an attribute to use as a filter.</p>"
          }
        },
        "Operation": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The type of search (For example, eq, geq, leq)</p>"
          }
        },
        "Value": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>Value of the filter.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>A filter name and value pair that is used
to return more specific results from a describe\n operation. Filters can be used to match a set of resources by
specific criteria, such as tags,\n attributes, or IDs.</p>"
      }
    },
    "com.amazonaws.licenseanagerusersubscriptions#FilterList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licenseanagerusersubscriptions#Filter"
      }
    },
  },

```

```

"com.amazonaws.licenseanagerusersubscriptions#IdentityProvider": {
  "type": "union",
  "members": {
    "ActiveDirectoryIdentityProvider": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ActiveDirectoryIdentityProvider",
      "traits": {
        "smithy.api#documentation": "<p>An object that details an Active Directory identity provider.</p>"
      }
    },
    "traits": {
      "smithy.api#documentation":
"<p>Details about an identity provider.</p>"
    }
  },
  "com.amazonaws.licenseanagerusersubscriptions#IdentityProviderSummary": {
    "type": "structure",
    "members": {
      "IdentityProvider": {
        "target": "com.amazonaws.licenseanagerusersubscriptions#IdentityProvider",
        "traits": {
          "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
          "smithy.api#required": {}
        }
      },
      "Settings": {
        "target": "com.amazonaws.licenseanagerusersubscriptions#Settings",
        "traits": {
          "smithy.api#documentation": "<p>An object that details the registered identity providers product
related configuration\n settings such as the subnets to provision VPC endpoints.</p>",
          "smithy.api#required":
{}
        }
      },
      "Product": {
        "target": "smithy.api#String",
        "traits": {
          "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
          "smithy.api#required": {}
        }
      },
      "Status": {
        "target": "smithy.api#String",
        "traits": {
          "smithy.api#documentation": "<p>The status of an identity provider.</p>",
          "smithy.api#required": {}
        }
      }
    }
  }
}

```

```

    "FailureMessage": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The failure message associated with an identity provider.</p>"
      }
    },
    "traits": {
      "smithy.api#documentation":
"<p>Describes an identity provider.</p>"
    },
    "com.amazonaws.licenseanagerusersubscriptions#IdentityProviderSummaryList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licenseanagerusersubscriptions#IdentityProviderSummary"
      }
    },
    "com.amazonaws.licenseanagerusersubscriptions#InstanceSummary": {
      "type": "structure",
      "members": {
        "InstanceId": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
            "smithy.api#required": {}
          }
        },
        "Status": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The status
of an EC2 instance resource.</p>",
            "smithy.api#required": {}
          }
        },
        "Products": {
          "target": "com.amazonaws.licenseanagerusersubscriptions#StringList",
          "traits": {
            "smithy.api#documentation": "<p>A list of provided user-based subscription products.</p>",
            "smithy.api#required": {}
          }
        },
        "LastStatusCheckDate": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The date of the last status check.</p>"
          }
        }
      }
    }
  }
}

```

```

    }
  },
  "StatusMessage": {
    "target": "smithy.api#String",
    "traits": {
      "smithy.api#documentation": "<p>The status message for an EC2 instance.</p>"
    }
  }
}
},
"traits": {
  "smithy.api#documentation": "<p>Describes an EC2 instance providing user-based subscriptions.</p>"
}
},
"com.amazonaws.licenseanagerusersubscriptions#InstanceSummaryList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licenseanagerusersubscriptions#InstanceSummary"
  }
},
"com.amazonaws.licenseanagerusersubscriptions#InstanceUserSummary": {
  "type": "structure",
  "members": {
    "Username": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
        "smithy.api#required": {}
      }
    },
    "InstanceId": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
        "smithy.api#required": {}
      }
    },
    "IdentityProvider": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#IdentityProvider",
      "traits": {
        "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
        "smithy.api#required": {}
      }
    },
    "Status": {
      "target": "smithy.api#String",

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    "traits": {
      "smithy.api#documentation": "<p>The status of a user associated with an EC2 instance.</p>",
      "smithy.api#required": {}
    }
  },
  "StatusMessage": {
    "target": "smithy.api#String",
    "traits": {
      "smithy.api#documentation": "<p>The status message for users of an EC2 instance.</p>"
    }
  },
  "Domain": {
    "target": "smithy.api#String",
    "traits": {
      "smithy.api#documentation": "<p>The domain name of the user.</p>"
    }
  },
  "AssociationDate": {
    "target": "smithy.api#String",
    "traits": {
      "smithy.api#documentation": "<p>The date a user was associated with an EC2 instance.</p>"
    }
  },
  "DisassociationDate": {
    "target": "smithy.api#String",
    "traits": {
      "smithy.api#documentation": "<p>The date a user was disassociated from an EC2 instance.</p>"
    }
  }
},
"traits": {
  "smithy.api#documentation": "<p>Describes users of an EC2 instance providing user-based
subscriptions.</p>"
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
  }
},
"com.amazonaws.licensemanagerusersubscriptions#InternalServerError": {
  "type": "structure",
  "members": {
    "message": {
      "target": "smithy.api#String"
    }
  }
}

```

```

    },
    "traits": {
      "smithy.api#documentation": "<p>An exception occurred with the service.</p>",
      "smithy.api#error": "server"
    }
  },
  "com.amazonaws.licenseanagerusersubscriptions#LicenseManagerUserSubscriptions": {
    "type": "service",

    "version": "2018-05-10",
    "operations": [
      {
        "target": "com.amazonaws.licenseanagerusersubscriptions#AssociateUser"
      },
      {
        "target": "com.amazonaws.licenseanagerusersubscriptions#DeregisterIdentityProvider"
      },
      {
        "target": "com.amazonaws.licenseanagerusersubscriptions#DisassociateUser"
      },
      {
        "target": "com.amazonaws.licenseanagerusersubscriptions#ListIdentityProviders"
      },
      {
        "target": "com.amazonaws.licenseanagerusersubscriptions#ListInstances"
      },
      {
        "target": "com.amazonaws.licenseanagerusersubscriptions#ListProductSubscriptions"
      },
      {
        "target": "com.amazonaws.licenseanagerusersubscriptions#ListUserAssociations"
      }
    ],
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#RegisterIdentityProvider"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#StartProductSubscription"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#StopProductSubscription"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#UpdateIdentityProviderSettings"
    }
  }
],
  "traits": {
    "aws.api#service": {

```

```

    "sdkId": "License Manager User Subscriptions",
    "arnNamespace": "license-manager-user-subscriptions",
    "cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
  },
  "aws.auth#sigv4": {
    "name": "license-manager-user-subscriptions"
  },
  "aws.protocols#restJson1": {},
  "smithy.api#cors": {
    "additionalAllowedHeaders": [
      "*",
      "content-type",
      "x-amz-content-sha256",
      "x-amz-user-agent",
      "x-amzn-platform-id",
      "x-amzn-trace-id",
      "content-length",
      "x-api-key",
      "authorization",
      "x-amz-date",
      "x-amz-security-token",
      "Access-Control-Allow-Headers",
      "Access-Control-Allow-Methods",
      "Access-Control-Allow-Origin"
    ],
    "additionalExposedHeaders": [
      "x-amzn-errortype",
      "x-amzn-requestid",
      "x-amzn-trace-id"
    ]
  }
],
  "smithy.api#documentation": "<p>With License Manager, you can create user-based subscriptions to utilize licensed software with a per user subscription fee on Amazon EC2 instances.</p>",
  "smithy.api#title": "AWS License Manager User Subscriptions",
  "smithy.rules#endpointRuleSet": {
    "version": "1.0",
    "parameters": {
      "Region": {
        "builtIn": "AWS::Region",
        "required": false,
        "documentation": "The AWS region used to dispatch the request.",
        "type": "String"
      }
    },
    "UseDualStack": {
      "builtIn": "AWS::UseDualStack",
      "required": true,
      "default": false,

```

```

        "documentation": "When true, use the dual-stack
endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
        "type": "Boolean"
    },
    "UseFIPS": {
        "builtIn": "AWS::UseFIPS",
        "required": true,
        "default": false,
        "documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the
configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
        "type": "Boolean"
    },
    "Endpoint": {
        "builtIn": "SDK::Endpoint",
        "required": false,
        "documentation": "Override the endpoint used to send this request",
        "type": "String"
    }
},
"rules": [
    {
        "conditions": [
            {
                "fn": "isSet",
                "argv": [
                    {
                        "ref": "Endpoint"
                    }
                ]
            }
        ]
    }
],
"type": "tree",
"rules": [
    {
        "conditions": [
            {
                "fn": "booleanEquals",
                "argv": [
                    {
                        "ref": "UseFIPS"
                    },
                    true
                ]
            }
        ]
    }
],
"error": "Invalid Configuration: FIPS and custom endpoint are not supported",

```



```

        "type": "error"
      },
      {
        "conditions": [
          {
            "fn": "booleanEquals",
            "argv": [
              {
                "ref": "UseDualStack"
              },
              true
            ]
          }
        ]
      }
    ],

    "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
    "type": "error"
  },
  {
    "conditions": [],
    "endpoint": {
      "url": {
        "ref": "Endpoint"
      },
      "properties": {},
      "headers": {}
    },
    "type": "endpoint"
  }
],
{
  "conditions": [
    {
      "fn": "isSet",
      "argv": [
        {
          "ref": "Region"
        }
      ]
    }
  ]
},
"type": "tree",
"rules": [
  {
    "conditions": [
      {

```

```

        "fn": "aws.partition",
        "argv": [
            {
                "ref": "Region"
            }
        ],
        "assign": "PartitionResult"
    }
],
"type": "tree",

"rules": [
    {
        "conditions": [
            {
                "fn": "booleanEquals",
                "argv": [
                    {
                        "ref": "UseFIPS"
                    },
                    true
                ]
            },
            {
                "fn": "booleanEquals",
                "argv": [
                    {
                        "ref": "UseDualStack"
                    },
                    true
                ]
            }
        ],
        "type": "tree",
        "rules": [
            {
                "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            true,
                            {
                                "fn": "getAttr",
                                "argv": [
                                    {
                                        "ref": "PartitionResult"
                                    }
                                ]
                            }
                        ]
                    }
                ]
            }
        ]
    }
]

```

```

        },
        "supportsFIPS"
    ]
}
]
},
{
    "fn": "booleanEquals",
    "argv": [
        true,
        {
            "fn": "getAttr",
            "argv": [
                {
                    "ref": "PartitionResult"
                },
                "supportsDualStack"
            ]
        }
    ]
},
],
"type": "tree",
"rules": [
    {
        "conditions": [],
        "endpoint": {
            "url": "https://license-manager-user-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
            "properties": {},
            "headers": {}
        },
        "type": "endpoint"
    }
],
},
{
    "conditions": [],
    "error": "FIPS and DualStack are enabled, but this partition does not support one or
both",
    "type": "error"
}
]
},
{
    "conditions": [

```

```

    {
      "fn": "booleanEquals",
      "argv": [
        {
          "ref": "UseFIPS"
        },
        true
      ]
    }
  ],
  "type": "tree",

"rules": [
  {
    "conditions": [
      {
        "fn": "booleanEquals",
        "argv": [
          true,
          {
            "fn": "getAttr",
            "argv": [
              {
                "ref": "PartitionResult"
              },
              "supportsFIPS"
            ]
          }
        ]
      }
    ]
  },
  {
    "type": "tree",
    "rules": [
      {
        "conditions": [],
        "endpoint": {
          "url": "https://license-manager-user-subscriptions-
fips.{Region}.{PartitionResult#dnsSuffix}",
          "properties": {},
          "headers": {}
        }
      },
      {
        "type": "endpoint"
      }
    ]
  },
  {

```

```

        "conditions": [],
        "error": "FIPS is enabled but this partition does not support FIPS",
        "type": "error"
    }
]
},
{
    "conditions": [
        {
            "fn": "booleanEquals",
            "argv": [
                {
                    "ref": "UseDualStack"
                },
                true
            ]
        }
    ],
    "type": "tree",
    "rules": [
        {
            "conditions": [
                {
                    "fn": "booleanEquals",
                    "argv": [
                        true,
                        {
                            "fn": "getAttr",
                            "argv": [
                                {
                                    "ref": "PartitionResult"
                                },
                                "supportsDualStack"
                            ]
                        }
                    ]
                }
            ]
        }
    ],
    "type": "tree",
    "rules": [
        {
            "conditions": [],
            "endpoint": {
                "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                "properties": {},

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        "headers": {}
      },
      "type": "endpoint"
    }
  ]
},
{
  "conditions": [],
  "error": "DualStack is enabled but this partition does
not support DualStack",
  "type": "error"
}
]
},
{
  "conditions": [],
  "endpoint": {
    "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",
    "properties": {},
    "headers": {}
  },
  "type": "endpoint"
}
]
}
]
},
{
  "conditions":
[],
  "error": "Invalid Configuration: Missing Region",
  "type": "error"
}
]
},
"smithy.rules#endpointTests": {
  "testCases": [
    {
      "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
        }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": true,

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        "UseDualStack": true
    }
},
{
    "documentation":
    "For region us-east-1 with FIPS enabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager-user-subscriptions-fips.us-east-1.amazonaws.com"
        }
    },
    "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
        "UseDualStack": false
    }
},
{
    "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager-user-subscriptions.us-east-1.api.aws"
        }
    },
    "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": true
    }
},
{
    "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager-user-subscriptions.us-east-1.amazonaws.com"
        }
    },
    "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": false
    }
},
{
    "documentation": "For region cn-north-1 with
FIPS enabled and DualStack enabled",
    "expect": {

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        "endpoint": {
            "url": "https://license-manager-user-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
        }
    },
    "params": {
        "Region": "cn-north-1",
        "UseFIPS": true,
        "UseDualStack": true
    }
},
{
    "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager-user-subscriptions-fips.cn-north-1.amazonaws.com.cn"
        }
    },
    "params": {
        "Region": "cn-north-1",
        "UseFIPS": true,
        "UseDualStack": false
    }
},
{
    "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager-user-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
        }
    },
    "params": {
        "Region": "cn-north-1",
        "UseFIPS": false,
        "UseDualStack": true
    }
},
{
    "documentation": "For region cn-north-1
with FIPS disabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager-user-subscriptions.cn-north-1.amazonaws.com.cn"
        }
    },
    "params": {
        "Region": "cn-north-1",

```



```

        "UseFIPS": false,
        "UseDualStack": false
    }
},
{
    "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.api.aws"
        }
    },
    "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": true,
        "UseDualStack": true
    }
},
{
    "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.amazonaws.com"
        }
    },
    "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": true,
        "UseDualStack": false
    }
},
{
    "documentation": "For region us-gov-east-1
with FIPS disabled and DualStack enabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager-user-subscriptions.us-gov-east-1.api.aws"
        }
    },
    "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": false,
        "UseDualStack": true
    }
},
{
    "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
    "expect": {

```

```

        "endpoint": {
            "url": "https://license-manager-user-subscriptions.us-gov-east-1.amazonaws.com"
        }
    },
    "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": false,
        "UseDualStack": false
    }
},
{
    "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
    "expect": {
        "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
    },
    "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": true,
        "UseDualStack": true
    }
},
{
    "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
    "expect":
{
        "endpoint": {
            "url": "https://license-manager-user-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
        }
    },
    "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": true,
        "UseDualStack": false
    }
},
{
    "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
    "expect": {
        "error": "DualStack is enabled but this partition does not support DualStack"
    },
    "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": false,
        "UseDualStack":
true
    }
},

```

```

{
  "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-user-subscriptions.us-iso-east-1.c2s.ic.gov"
    }
  },
  "params": {
    "Region": "us-iso-east-1",
    "UseFIPS": false,
    "UseDualStack": false
  }
},
{
  "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
  "expect": {
    "error": "FIPS and DualStack are enabled, but
this partition does not support one or both"
  },
  "params": {
    "Region": "us-isob-east-1",
    "UseFIPS": true,
    "UseDualStack": true
  }
},
{
  "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-user-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
    }
  },
  "params": {
    "Region": "us-isob-east-1",
    "UseFIPS": true,
    "UseDualStack": false
  }
},
},
{
  "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
  "expect": {
    "error": "DualStack is enabled but this partition does not support DualStack"
  },
  "params": {
    "Region": "us-isob-east-1",
    "UseFIPS": false,
    "UseDualStack": true
  }
}

```

```

    }
  },
  {
    "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-user-subscriptions.us-isob-east-1.sc2s.sgov.gov"
      }
    },
    "params": {
      "Region": "us-isob-east-1",
      "UseFIPS": false,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
    "expect": {
      "endpoint": {
        "url": "https://example.com"
      }
    },
    "params": {
      "Region": "us-east-1",
      "UseFIPS": false,
      "UseDualStack": false,
      "Endpoint": "https://example.com"
    }
  },
  {

```

```

    "documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
    "expect": {
      "endpoint": {
        "url": "https://example.com"
      }
    },
    "params": {
      "UseFIPS": false,
      "UseDualStack": false,
      "Endpoint": "https://example.com"
    }
  },
  {
    "documentation": "For custom endpoint with fips enabled and dualstack disabled",
    "expect": {
      "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
    },

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```

    "params": {
      "Region": "us-east-1",
      "UseFIPS": true,
      "UseDualStack": false,
      "Endpoint": "https://example.com"
    }
  },
  {
    "documentation": "For custom endpoint with fips disabled and dualstack enabled",
    "expect": {
      "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
    },
    "params": {
      "Region": "us-east-1",
      "UseFIPS": false,
      "UseDualStack": true,
      "Endpoint": "https://example.com"
    }
  },
  {
    "documentation": "Missing region",
    "expect": {
      "error": "Invalid Configuration: Missing Region"
    }
  }
],
"version": "1.0"
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerErrorException"
    }
  ]
}

```

```

    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ResourceNotFoundException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ServiceQuotaExceededException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ThrottlingException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Lists the identity providers for user-based subscriptions.</p>",
    "smithy.api#http": {
      "code": 200,
      "method": "POST",
      "uri": "/identity-provider/ListIdentityProviders"
    },
    "smithy.api#paginated":
  {
    "inputToken": "NextToken",
    "outputToken": "NextToken",
    "pageSize": "MaxResults",
    "items": "IdentityProviderSummaries"
  }
  },
  "com.amazonaws.licenseanagerusersubscriptions#ListIdentityProvidersRequest": {
    "type": "structure",
    "members": {
      "MaxResults": {
        "target": "com.amazonaws.licenseanagerusersubscriptions#BoxInteger",
        "traits": {
          "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
        }
      },
      "NextToken": {
        "target": "smithy.api#String",
        "traits": {
          "smithy.api#documentation": "<p>Token for the next set of results.</p>"
        }
      }
    }
  },
  "com.amazonaws.licenseanagerusersubscriptions#ListIdentityProvidersResponse":

```

```

{
  "type": "structure",
  "members": {
    "IdentityProviderSummaries": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",
      "traits": {
        "smithy.api#documentation": "<p>Metadata that describes the list identity providers operation.</p>",
        "smithy.api#required": {}
      }
    },
    "NextToken": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    }
  }
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstances": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerError"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
    }
  ]
}

```

```

],
"traits": {
  "smithy.api#documentation": "<p>Lists the EC2 instances providing user-based subscriptions.</p>",
  "smithy.api#http": {
    "code": 200,
    "method": "POST",
    "uri": "/instance/ListInstances"
  },
  "smithy.api#paginated": {
    "inputToken": "NextToken",
    "outputToken": "NextToken",
    "pageSize": "MaxResults",
    "items": "InstanceSummaries"
  }
}
},
"com.amazonaws.licenseanagerusersubscriptions#ListInstancesRequest": {
  "type": "structure",
  "members": {
    "MaxResults": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#BoxInteger",
      "traits": {
        "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
      }
    },
    "NextToken": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    },
    "Filters": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#FilterList",
      "traits": {
        "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those that match one or\n more sets of key-value pairs that you specify.</p>"
      }
    }
  }
},
"com.amazonaws.licenseanagerusersubscriptions#ListInstancesResponse": {
  "type":
"structure",
  "members": {
    "InstanceSummaries": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#InstanceSummaryList",
      "traits": {
        "smithy.api#documentation": "<p>Metadata that describes the list instances operation.</p>"
      }
    }
  }
}

```



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    }
  },
  "NextToken": {
    "target": "smithy.api#String",
    "traits": {
      "smithy.api#documentation": "<p>Token for the next set of results.</p>"
    }
  }
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerErrorException"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Lists the user-based subscription products available from an identity provider.</p>",
    "smithy.api#http": {
      "code": 200,
      "method": "POST",
      "uri": "/user/ListProductSubscriptions"
    }
  }
}

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    },
    "smithy.api#paginated": {
      "inputToken": "NextToken",
      "outputToken": "NextToken",
      "pageSize": "MaxResults",
      "items": "ProductUserSummaries"
    }
  }
},
"com.amazonaws.licenseanagerusersubscriptions#ListProductSubscriptionsRequest": {
  "type": "structure",
  "members": {
    "Product": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The name
of the user-based subscription product.</p>",
        "smithy.api#required": {}
      }
    },
    "IdentityProvider": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#IdentityProvider",
      "traits": {
        "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
        "smithy.api#required": {}
      }
    },
    "MaxResults": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#BoxInteger",
      "traits": {
        "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
      }
    },
    "Filters": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#FilterList",
      "traits": {
        "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those that match
one or\n more sets of key-value pairs that you specify.</p>"
      }
    },
    "NextToken": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    }
  }
}

```

```

    },
    "com.amazonaws.licenseanagerusersubscriptions#ListProductSubscriptionsResponse": {
      "type": "structure",
      "members": {
        "ProductUserSummaries": {
          "target": "com.amazonaws.licenseanagerusersubscriptions#ProductUserSummaryList",
          "traits": {
            "smithy.api#documentation": "<p>Metadata that describes the list product subscriptions
operation.</p>"
          }
        },
        "NextToken": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        }
      }
    },
    "com.amazonaws.licenseanagerusersubscriptions#ListUserAssociations": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licenseanagerusersubscriptions#ListUserAssociationsRequest"
      },
      "output": {
        "target": "com.amazonaws.licenseanagerusersubscriptions#ListUserAssociationsResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licenseanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licenseanagerusersubscriptions#ConflictException"
        },
        {
          "target":
"com.amazonaws.licenseanagerusersubscriptions#InternalServerError"
        },
        {
          "target": "com.amazonaws.licenseanagerusersubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licenseanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
          "target": "com.amazonaws.licenseanagerusersubscriptions#ThrottlingException"
        }
      ]
    }
  }
}

```

```

    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Lists user associations for an identity provider.</p>",
    "smithy.api#http": {
      "code": 200,
      "method": "POST",
      "uri": "/user/ListUserAssociations"
    },
    "smithy.api#paginated":
  {
    "inputToken": "NextToken",
    "outputToken": "NextToken",
    "pageSize": "MaxResults",
    "items": "InstanceUserSummaries"
  }
  },
  "com.amazonaws.licenseanagerusersubscriptions#ListUserAssociationsRequest": {
    "type": "structure",
    "members": {
      "InstanceId": {
        "target": "smithy.api#String",
        "traits": {
          "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
          "smithy.api#required": {}
        }
      },
      "IdentityProvider": {
        "target": "com.amazonaws.licenseanagerusersubscriptions#IdentityProvider",
        "traits": {
          "smithy.api#documentation": "<p>An object that specifies details for the identity
provider.</p>",
          "smithy.api#required": {}
        }
      },
      "MaxResults": {
        "target": "com.amazonaws.licenseanagerusersubscriptions#BoxInteger",
        "traits": {
          "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
        }
      },
      "Filters": {
        "target": "com.amazonaws.licenseanagerusersubscriptions#FilterList",
        "traits": {

```

```

    "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those
that match one or\n    more sets of key-value pairs that you specify.</p>"
    }
  },
  "NextToken": {
    "target": "smithy.api#String",
    "traits": {
      "smithy.api#documentation": "<p>Token for
the next set of results.</p>"
    }
  }
},
"com.amazonaws.licenseanagerusersubscriptions#ListUserAssociationsResponse": {
  "type": "structure",
  "members": {
    "InstanceUserSummaries": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#InstanceUserSummaryList",
      "traits": {
        "smithy.api#documentation": "<p>Metadata that describes the list user association operation.</p>"
      }
    },
    "NextToken": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    }
  }
},
"com.amazonaws.licenseanagerusersubscriptions#ProductUserSummary": {
  "type": "structure",
  "members": {
    "Username": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The user name from the identity provider of the user.</p>",
        "smithy.api#required": {}
      }
    },
    "Product": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
        "smithy.api#required": {}
      }
    }
  }
},

```

```

"IdentityProvider": {
  "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
  "traits": {
    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
    "smithy.api#required": {}
  }
},
"Status": {
  "target": "smithy.api#String",
  "traits": {
    "smithy.api#documentation": "<p>The status of a product for a user.</p>",
    "smithy.api#required": {}
  }
},
"StatusMessage": {
  "target": "smithy.api#String",
  "traits": {
    "smithy.api#documentation": "<p>The status message for a product for a user.</p>"
  }
},
"Domain": {
  "target": "smithy.api#String",
  "traits": {
    "smithy.api#documentation": "<p>The domain name of the user.</p>"
  }
},
"SubscriptionStartDate": {
  "target": "smithy.api#String",
  "traits": {
    "smithy.api#documentation": "<p>The
start date of a subscription.</p>"
  }
},
"SubscriptionEndDate": {
  "target": "smithy.api#String",
  "traits": {
    "smithy.api#documentation": "<p>The end date of a subscription.</p>"
  }
},
"traits": {
  "smithy.api#documentation": "<p>The summary of the user-based subscription products for a user.</p>"
}
},
"com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
  "type": "list",
  "member": {

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    "target": "com.amazonaws.licenseanagerusersubscriptions#ProductUserSummary"
  }
},
"com.amazonaws.licenseanagerusersubscriptions#RegisterIdentityProvider": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licenseanagerusersubscriptions#RegisterIdentityProviderRequest"
  },
  "output": {
    "target": "com.amazonaws.licenseanagerusersubscriptions#RegisterIdentityProviderResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ConflictException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#InternalServerErrorException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ResourceNotFoundException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ServiceQuotaExceededException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ThrottlingException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Registers an identity provider for user-based subscriptions.</p>",
    "smithy.api#http": {
      "code": 200,
      "method": "POST",
      "uri": "/identity-provider/RegisterIdentityProvider"
    },
    "smithy.api#idempotent": {}
  }
},
"com.amazonaws.licenseanagerusersubscriptions#RegisterIdentityProviderRequest": {
  "type": "structure",
  "members": {
    "IdentityProvider": {

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    "target": "com.amazonaws.licenseanagerusersubscriptions#IdentityProvider",
    "traits": {
      "smithy.api#documentation": "<p>An object that specifies details for the identity
provider.</p>",
      "smithy.api#required": {}
    }
  },
  "Product": {
    "target": "smithy.api#String",
    "traits": {
      "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
      "smithy.api#required": {}
    }
  },
  "Settings": {
    "target": "com.amazonaws.licenseanagerusersubscriptions#Settings",
    "traits": {
      "smithy.api#documentation": "<p>The registered identity providers product related configuration
settings such as the\n  subnets to provision VPC endpoints.</p>"
    }
  }
},
"com.amazonaws.licenseanagerusersubscriptions#RegisterIdentityProviderResponse": {
  "type": "structure",
  "members": {
    "IdentityProviderSummary":
  {
    "target": "com.amazonaws.licenseanagerusersubscriptions#IdentityProviderSummary",
    "traits": {
      "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider
operation.</p>",
      "smithy.api#required": {}
    }
  }
  }
},
"com.amazonaws.licenseanagerusersubscriptions#ResourceNotFoundException": {
  "type": "structure",
  "members": {
    "message": {
      "target": "smithy.api#String"
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>The resource couldn't be found.</p>",
    "smithy.api#error": "client",
    "smithy.api#httpError": 404
  }
}

```



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    }
  },
  "com.amazonaws.licenseanagerusersubscriptions#SecurityGroup": {
    "type": "string",

"traits": {
  "smithy.api#length": {
    "min": 5,
    "max": 200
  },
  "smithy.api#pattern": "^sg-([0-9a-z]{8})([0-9a-z]{17})$"
}
},
"com.amazonaws.licenseanagerusersubscriptions#ServiceQuotaExceededException": {
  "type": "structure",
  "members": {
    "message": {
      "target": "smithy.api#String"
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>The request failed because a service quota is exceeded.</p>",
    "smithy.api#error": "client"
  }
},
"com.amazonaws.licenseanagerusersubscriptions#Settings": {
  "type": "structure",
  "members": {
    "Subnets": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#Subnets",
      "traits": {
        "smithy.api#documentation":
"<p>The subnets defined for the registered identity provider.</p>",
        "smithy.api#length": {
          "min": 1
        },
        "smithy.api#required": {}
      }
    },
    "SecurityGroupId": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#SecurityGroup",
      "traits": {
        "smithy.api#documentation": "<p>A security group ID that allows inbound TCP port 1688
communication between resources in\n  your VPC and the VPC endpoint for activation servers.</p>",
        "smithy.api#required": {}
      }
    }
  },
}

```

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    "traits": {
      "smithy.api#documentation": "<p>The registered identity providers product related configuration settings
such as the\n    subnets to provision VPC endpoints, and the security group ID that
is associated with the VPC\n    endpoints. The security group should permit inbound TCP port 1688
communication from resources\n    in the VPC.</p>"
    }
  },
  "com.amazonaws.licenseanagerusersubscriptions#StartProductSubscription": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#StartProductSubscriptionRequest"
    },
    "output": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#StartProductSubscriptionResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licenseanagerusersubscriptions#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licenseanagerusersubscriptions#ConflictException"
      },
      {
        "target": "com.amazonaws.licenseanagerusersubscriptions#InternalServerErrorException"
      },
      {
        "target": "com.amazonaws.licenseanagerusersubscriptions#ResourceNotFoundException"
      },
      {
        "target": "com.amazonaws.licenseanagerusersubscriptions#ServiceQuotaExceededException"
      },
      {
        "target": "com.amazonaws.licenseanagerusersubscriptions#ThrottlingException"
      },
      {
        "target": "com.amazonaws.licenseanagerusersubscriptions#ValidationException"
      }
    ]
  },
  "traits": {
    "smithy.api#documentation": "<p>Starts a product subscription for a user with the specified identity
provider.</p>\n    <note>\n    <p>Your estimated bill for charges on the number of users and related costs
will take 48\n    hours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing status)
in Amazon Web Services Billing.
For more information, see <a
href=\\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n    monthly
charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n    </note>",
    "smithy.api#http": {
      "code": 200,

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        "method": "POST",
        "uri": "/user/StartProductSubscription"
    }
}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {
    "type": "structure",
    "members": {
        "Username": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The user name from the identity provider of the user.</p>",
                "smithy.api#required": {}
            }
        },
        "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
                "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                "smithy.api#required": {}
            }
        },
        "Product": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                "smithy.api#required": {}
            }
        },
        "Domain": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The domain name of the user.</p>"
            }
        }
    }
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse": {
    "type": "structure",
    "members": {
        "ProductUserSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
            "traits": {
                "smithy.api#documentation": "<p>Metadata that describes the start product subscription operation.</p>",
                "smithy.api#required": {}
            }
        }
    }
}

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    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerErrorException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
      }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Stops a product subscription for a user with the specified identity provider.</p>",
      "smithy.api#http": {
        "code": 200,
        "method": "POST",
        "uri": "/user/StopProductSubscription"
      }
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
    "type": "structure",
    "members": {
      "Username": {

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    "target": "smithy.api#String",
    "traits": {
      "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
      "smithy.api#required": {}
    }
  },
  "IdentityProvider": {
    "target": "com.amazonaws.licenseanagerusersubscriptions#IdentityProvider",
    "traits": {
      "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
      "smithy.api#required":
    }
  }
},
"Product": {
  "target": "smithy.api#String",
  "traits": {
    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
    "smithy.api#required": {}
  }
},
"Domain": {
  "target": "smithy.api#String",
  "traits": {
    "smithy.api#documentation": "<p>The domain name of the user.</p>"
  }
}
},
"com.amazonaws.licenseanagerusersubscriptions#StopProductSubscriptionResponse": {
  "type": "structure",
  "members": {
    "ProductUserSummary": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ProductUserSummary",
      "traits": {
        "smithy.api#documentation":
      }
    }
  }
},
"com.amazonaws.licenseanagerusersubscriptions#StringList": {
  "type": "list",
  "member": {
    "target": "smithy.api#String"
  }
},

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```

"com.amazonaws.licenseanagerusersubscriptions#Subnet": {
  "type": "string",
  "traits": {
    "smithy.api#pattern": "subnet-[a-z0-9]{8,17}"
  }
},
"com.amazonaws.licenseanagerusersubscriptions#Subnets": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licenseanagerusersubscriptions#Subnet"
  }
},
"com.amazonaws.licenseanagerusersubscriptions#ThrottlingException": {
  "type": "structure",
  "members": {
    "message": {
      "target": "smithy.api#String"
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>The request was denied because of request throttling. Retry the request.</p>",
    "smithy.api#error": "client"
  }
},
"com.amazonaws.licenseanagerusersubscriptions#UpdateIdentityProviderSettings": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licenseanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
  },
  "output": {
    "target": "com.amazonaws.licenseanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#InternalServerErrorException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ThrottlingException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ValidationException"
    }
  ],

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```

    "traits": {
      "smithy.api#documentation": "<p>Updates additional product configuration settings for the registered
identity\n  provider.</p>",
      "smithy.api#http": {
        "code": 200,
        "method": "POST",
        "uri": "/identity-provider/UpdateIdentityProviderSettings"
      },
      "smithy.api#idempotent": {}
    }
  },
  "com.amazonaws.licenseanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
    "type": "structure",
    "members": {
      "IdentityProvider": {
        "target": "com.amazonaws.licenseanagerusersubscriptions#IdentityProvider",
        "traits": {
          "smithy.api#required": {}
        }
      },
      "Product": {
        "target": "smithy.api#String",
        "traits": {
          "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
          "smithy.api#required": {}
        }
      },
      "UpdateSettings": {
        "target": "com.amazonaws.licenseanagerusersubscriptions#UpdateSettings",
        "traits": {
          "smithy.api#documentation": "<p>Updates the registered identity providers product related
configuration settings. You can\n  update any combination of settings in a single operation such as the:</p>\n
<ul>\n  <li>\n    <p>Subnets which you want to add to provision VPC endpoints.</p>\n    </li>\n
  <li>\n    <p>Subnets which you want to remove the VPC endpoints from.</p>\n    </li>\n
  <li>\n    <p>Security group ID which permits traffic to the VPC endpoints.</p>\n    </li>\n  </ul>",
          "smithy.api#required": {}
        }
      }
    }
  },
  "com.amazonaws.licenseanagerusersubscriptions#UpdateIdentityProviderSettingsResponse": {
    "type": "structure",
    "members": {
      "IdentityProviderSummary": {
        "target": "com.amazonaws.licenseanagerusersubscriptions#IdentityProviderSummary",
        "traits": {
          "smithy.api#required": {}
        }
      }
    }
  }
}

```

```

    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings": {
    "type": "structure",
    "members": {
      "AddSubnets": {

        "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
        "traits": {
          "smithy.api#documentation": "<p>The ID of one or more subnets in which License Manager will
create a VPC endpoint for products that\n    require connectivity to activation servers.</p>",
          "smithy.api#required": {}
        }
      },
      "RemoveSubnets": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
        "traits": {
          "smithy.api#documentation": "<p>The ID of one or more subnets to remove.</p>",
          "smithy.api#required": {}
        }
      },
      "SecurityGroupId": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
        "traits": {
          "smithy.api#documentation": "<p>A security group ID
that allows inbound TCP port 1688 communication between resources in\n    your VPC and the VPC endpoints for
activation servers.</p>"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Updates the registered identity providers product related configuration
settings such as\n    the subnets to provision VPC endpoints.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>A parameter is not valid.</p>",
        "smithy.api#error": "client"
      }
    }
  }
}

```



```

}
}
{
  "smithy": "2.0",
  "metadata": {
    "suppressions": [
      {
        "id": "HttpMethodSemantics",
        "namespace": "*"
      },
      {
        "id": "HttpStatusCodeSemantics",
        "namespace": "*"
      },
      {
        "id": "PaginatedTrait",
        "namespace": "*"
      },
      {
        "id": "HttpHeaderTrait",
        "namespace": "*"
      },
      {
        "id": "HttpUriConflict",
        "namespace": "*"
      },
      {
        "id": "Service",
        "namespace": "*"
      }
    ]
  },
  "shapes": {
    "com.amazonaws.licensemanager#AWSLicenseManager": {
      "type": "service",
      "version": "2018-08-01",
      "operations": [
        {
          "target": "com.amazonaws.licensemanager#AcceptGrant"
        },
        {
          "target": "com.amazonaws.licensemanager#CheckInLicense"
        },
        {
          "target": "com.amazonaws.licensemanager#CheckoutBorrowLicense"
        },
        {

```

```
"target": "com.amazonaws.licensemanager#CheckoutLicense"
},
{
  "target": "com.amazonaws.licensemanager#CreateGrant"
},
{
  "target": "com.amazonaws.licensemanager#CreateGrantVersion"
},
{
  "target": "com.amazonaws.licensemanager#CreateLicense"
},
{
  "target": "com.amazonaws.licensemanager#CreateLicenseConfiguration"
},
{
  "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource"
},
{
  "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator"
},
{
  "target": "com.amazonaws.licensemanager#CreateLicenseVersion"
},
{
  "target": "com.amazonaws.licensemanager#CreateToken"
},
{
  "target": "com.amazonaws.licensemanager#DeleteGrant"
},
{
  "target": "com.amazonaws.licensemanager#DeleteLicense"
},
{
  "target": "com.amazonaws.licensemanager#DeleteLicenseConfiguration"
},
{
  "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator"
},
{
  "target": "com.amazonaws.licensemanager#DeleteToken"
},
{
  "target": "com.amazonaws.licensemanager#ExtendLicenseConsumption"
},
},
{
  "target": "com.amazonaws.licensemanager#GetAccessToken"
},
},
```

```

{
  "target": "com.amazonaws.licensemanager#GetGrant"
},
{
  "target": "com.amazonaws.licensemanager#GetLicense"
},
{
  "target": "com.amazonaws.licensemanager#GetLicenseConfiguration"
},
{
  "target": "com.amazonaws.licensemanager#GetLicenseConversionTask"
},
{
  "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGenerator"
},
{
  "target": "com.amazonaws.licensemanager#GetLicenseUsage"
},
{
  "target": "com.amazonaws.licensemanager#GetServiceSettings"
},
{
  "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration"
},
{
  "target": "com.amazonaws.licensemanager#ListDistributedGrants"
},
{
  "target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations"
},
{
  "target": "com.amazonaws.licensemanager#ListLicenseConfigurations"
},
{
  "target": "com.amazonaws.licensemanager#ListLicenseConversionTasks"
},
{
  "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators"
},
{
  "target": "com.amazonaws.licensemanager#ListLicenses"
},
{
  "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResource"
},
{

```

```

    "target": "com.amazonaws.licensemanager#ListLicenseVersions"
  },
  {
    "target": "com.amazonaws.licensemanager#ListReceivedGrants"
  },
  {
    "target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganization"
  },
  {
    "target": "com.amazonaws.licensemanager#ListReceivedLicenses"
  },
  {
    "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganization"
  },
  {
    "target": "com.amazonaws.licensemanager#ListResourceInventory"
  },
  {
    "target": "com.amazonaws.licensemanager#ListTagsForResource"
  },
  {
    "target": "com.amazonaws.licensemanager#ListTokens"
  },
  {
    "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfiguration"
  },
  {
    "target": "com.amazonaws.licensemanager#RejectGrant"
  },
  {
    "target": "com.amazonaws.licensemanager#TagResource"
  },
  {
    "target": "com.amazonaws.licensemanager#UntagResource"
  },
  {
    "target": "com.amazonaws.licensemanager#UpdateLicenseConfiguration"
  },
  {
    "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator"
  },
  {
    "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource"
  },
  {
    "target": "com.amazonaws.licensemanager#UpdateServiceSettings"
  }
],

```

```

"traits": {
  "aws.api#service": {
    "sdkId": "License Manager",
    "arnNamespace": "license-manager",
    "cloudFormationName": "LicenseManager",
    "cloudTrailEventSource": "licensemanager.amazonaws.com",
    "endpointPrefix": "license-manager"
  },
  "aws.auth#sigv4": {
    "name": "license-manager"
  },
  "aws.protocols#awsJson1_1": {},
  "smithy.api#documentation": "<p>License Manager makes it easier to manage licenses from software
vendors across multiple \n      Amazon Web Services accounts and on-premises servers.</p>",
  "smithy.api#title": "AWS License Manager",
  "smithy.api#xmlNamespace": {
    "uri": "https://license-manager.amazonaws.com/doc/2018_08_01"
  },
  "smithy.rules#endpointRuleSet": {
    "version": "1.0",
    "parameters": {
      "Region": {
        "builtIn": "AWS::Region",
        "required": false,
        "documentation": "The AWS region used to dispatch the request.",
        "type": "String"
      },
      "UseDualStack": {
        "builtIn": "AWS::UseDualStack",
        "required": true,
        "default": false,
        "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not
support dual-stack, dispatching the request MAY return an error.",
        "type": "Boolean"
      },
      "UseFIPS": {
        "builtIn": "AWS::UseFIPS",
        "required": true,
        "default": false,
        "documentation": "When true, send
this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant
endpoint, dispatching the request will return an error.",
        "type": "Boolean"
      }
    },
    "Endpoint": {
      "builtIn": "SDK::Endpoint",
      "required": false,
      "documentation": "Override the endpoint used to send this request",

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```

        "type": "String"
    }
},
"rules": [
    {
        "conditions": [
            {
                "fn": "isSet",
                "argv": [
                    {
                        "ref": "Endpoint"
                    }
                ]
            }
        ]
    }
],
"type": "tree",
"rules": [
    {
        "conditions": [
            {
                "fn": "booleanEquals",
                "argv": [
                    {
                        "ref": "UseFIPS"
                    },
                    true
                ]
            }
        ],
        "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
        "type": "error"
    },
    {
        "conditions": [
            {
                "fn": "booleanEquals",
                "argv": [
                    {
                        "ref": "UseDualStack"
                    },
                    true
                ]
            }
        ],
        "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
        "type": "error"
    }
]

```

```

    },
    {
      "conditions": [],
      "endpoint": {
        "url": {
          "ref": "Endpoint"
        },
        "properties": {},
        "headers": {}
      },
      "type": "endpoint"
    }
  ]
},
{
  "conditions": [
    {
      "fn": "isSet",
      "argv": [
        {
          "ref": "Region"
        }
      ]
    }
  ],
  "type": "tree",
  "rules": [
    {
      "conditions": [
        {
          "fn": "aws.partition",
          "argv": [
            {
              "ref": "Region"
            }
          ]
        }
      ],
      "assign": "PartitionResult"
    }
  ],
  "type": "tree",
  "rules": [
    {
      "conditions": [
        {
          "fn": "booleanEquals",
          "argv": [
            {
              "ref":

```

"UseFIPS"

```
    },
    true
  ]
},
{
  "fn": "booleanEquals",
  "argv": [
    {
      "ref": "UseDualStack"
    },
    true
  ]
}
],
"type": "tree",
"rules": [
  {
    "conditions": [
      {
        "fn": "booleanEquals",
        "argv": [
          true,
          {
            "fn": "getAttr",
            "argv": [
              {
                "ref": "PartitionResult"
              },
              "supportsFIPS"
            ]
          }
        ]
      }
    ]
  },
  {
    "fn": "booleanEquals",
    "argv": [
      true,
      {
        "fn": "getAttr",
        "argv": [
          {
            "ref": "PartitionResult"
          },
          "supportsDualStack"
        ]
      }
    ]
  }
]
```

"supportsDualStack"

]



```

        }
      ]
    }
  ],
  "type": "tree",
  "rules": [
    {
      "conditions": [],
      "endpoint": {
        "url": "https://license-manager-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
        "properties": {},
        "headers": {}
      },
      "type": "endpoint"
    }
  ],
  "error": "FIPS and DualStack are enabled, but this partition does not support one or
both",
  "type": "error"
}
],
{
  "conditions": [
    {
      "fn": "booleanEquals",
      "argv": [
        {
          "ref": "UseFIPS"
        },
        true
      ]
    }
  ],
  "type": "tree",
  "rules": [
    {
      "conditions": [
        {
          "fn": "booleanEquals",
          "argv": [
            true,

```

```

{
    "fn": "getAttr",
    "argv": [
        {
            "ref": "PartitionResult"
        },
        "supportsFIPS"
    ]
}
],
"type": "tree",
"rules": [

{
    "conditions": [],
    "endpoint": {
        "url": "https://license-manager-fips.{Region}.{PartitionResult#dnsSuffix}",
        "properties": {},
        "headers": {}
    },
    "type": "endpoint"
}
],
{
    "conditions": [],
    "error": "FIPS is enabled but this
partition does not support FIPS",
    "type": "error"
}
],
{
    "conditions": [
        {
            "fn": "booleanEquals",
            "argv": [
                {
                    "ref": "UseDualStack"
                },
                true
            ]
        }
    ]
},
"type": "tree",

```

```

"rules": [
  {
    "conditions": [
      {
        "fn": "booleanEquals",
        "argv": [
          true,
          {
            "fn": "getAttr",
            "argv": [
              {
                "ref": "PartitionResult"
              }
            ],
          }
        ],
      }
    ],
    "supportsDualStack"
  ]
},
{
  "type": "tree",
  "rules": [
    {
      "conditions": [],
      "endpoint": {
        "url": "https://license-
manager.{Region}.{PartitionResult#dualStackDnsSuffix}",
        "properties": {},
        "headers": {}
      },
      "type": "endpoint"
    }
  ],
},
{
  "conditions": [],
  "error": "DualStack is enabled but this partition does not support DualStack",
  "type": "error"
}
],
{
  "conditions": [],
  "endpoint": {
    "url": "https://license-manager.{Region}.{PartitionResult#dnsSuffix}",
    "properties": {},
    "headers": {}
  }
}
]
}

```

```

        },
        "type": "endpoint"
    }
]
}
],
},
{
    "conditions": [],
    "error": "Invalid Configuration: Missing Region",
    "type": "error"
}
]
},
"smithy.rules#endpointTests": {
    "testCases": [
        {
            "documentation": "For region af-south-1 with FIPS disabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager.af-south-1.amazonaws.com"
                }
            },
            "params": {
                "Region": "af-south-1",
                "UseFIPS": false,
                "UseDualStack": false
            }
        },
        {
            "documentation": "For region ap-east-1 with FIPS disabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager.ap-east-1.amazonaws.com"
                }
            },
            "params": {
                "Region": "ap-east-1",
                "UseFIPS": false,
                "UseDualStack": false
            }
        },
        {
            "documentation": "For region ap-northeast-1 with FIPS disabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager.ap-northeast-1.amazonaws.com"
                }
            }
        }
    ]
}

```

```

    }
  },
  "params": {
    "Region": "ap-northeast-1",
    "UseFIPS": false,
    "UseDualStack": false
  }
},
{
  "documentation": "For region ap-northeast-2 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.ap-northeast-2.amazonaws.com"
    }
  },
  "params": {
    "Region": "ap-northeast-2",
    "UseFIPS": false,
    "UseDualStack": false
  }
},
{
  "documentation": "For region ap-northeast-3 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.ap-northeast-3.amazonaws.com"
    }
  },
  "params": {
    "Region": "ap-northeast-3",
    "UseFIPS": false,
    "UseDualStack": false
  }
},
{
  "documentation": "For region ap-south-1 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.ap-south-1.amazonaws.com"
    }
  },
  "params": {
    "Region": "ap-south-1",
    "UseFIPS": false,
    "UseDualStack": false
  }
},

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```

    {
      "documentation": "For region ap-southeast-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.ap-southeast-1.amazonaws.com"
        }
      }
    },
    {
      "params": {
        "Region": "ap-southeast-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region ap-southeast-2 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.ap-southeast-2.amazonaws.com"
        }
      }
    },
    {
      "params": {
        "Region": "ap-southeast-2",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region ap-southeast-3 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.ap-southeast-3.amazonaws.com"
        }
      }
    },
    {
      "params": {
        "Region": "ap-southeast-3",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region ca-central-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.ca-central-1.amazonaws.com"
        }
      }
    },
    {

```

```

"params": {
  "Region": "ca-central-1",
  "UseFIPS": false,
  "UseDualStack": false
}
},
{
  "documentation": "For region eu-central-1 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.eu-central-1.amazonaws.com"
    }
  },
  "params": {
    "Region": "eu-central-1",
    "UseFIPS": false,
    "UseDualStack": false
  }
},
{
  "documentation": "For region eu-north-1 with FIPS
disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.eu-north-1.amazonaws.com"
    }
  },
  "params": {
    "Region": "eu-north-1",
    "UseFIPS": false,
    "UseDualStack": false
  }
},
{
  "documentation": "For region eu-south-1 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.eu-south-1.amazonaws.com"
    }
  },
  "params": {
    "Region":
"eu-south-1",
    "UseFIPS": false,
    "UseDualStack": false
  }
},

```

```

{
  "documentation": "For region eu-west-1 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.eu-west-1.amazonaws.com"
    }
  },
  "params": {
    "Region": "eu-west-1",
    "UseFIPS": false,
    "UseDualStack": false
  }
},
{
  "documentation": "For region eu-west-2 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.eu-west-2.amazonaws.com"
    }
  },
  "params": {
    "Region": "eu-west-2",
    "UseFIPS": false,
    "UseDualStack": false
  }
},
{
  "documentation": "For region eu-west-3 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.eu-west-3.amazonaws.com"
    }
  },
  "params": {
    "Region": "eu-west-3",
    "UseFIPS": false,
    "UseDualStack": false
  }
},
{
  "documentation": "For region me-south-1 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.me-south-1.amazonaws.com"
    }
  },

```



```

    "params": {
      "Region": "me-south-1",
      "UseFIPS": false,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region sa-east-1 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager.sa-east-1.amazonaws.com"
      }
    },
    "params": {
      "Region": "sa-east-1",
      "UseFIPS": false,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager.us-east-1.amazonaws.com"
      }
    },
    "params": {
      "Region": "us-east-1",
      "UseFIPS": false,
      "UseDualStack": false
    }
  },
},
{
  "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-fips.us-east-1.amazonaws.com"
    }
  },
  "params": {
    "Region": "us-east-1",
    "UseFIPS": true,
    "UseDualStack": false
  }
},
{
  "documentation": "For region us-east-2 with FIPS disabled and DualStack disabled",

```

```

    "expect": {
      "endpoint": {
        "url": "https://license-manager.us-east-2.amazonaws.com"
      }
    },
    "params": {
      "Region": "us-east-2",
      "UseFIPS": false,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region us-east-2 with FIPS enabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-fips.us-east-2.amazonaws.com"
      }
    },
    "params": {
      "Region": "us-east-2",
      "UseFIPS": true,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region
us-west-1 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager.us-west-1.amazonaws.com"
      }
    },
    "params": {
      "Region": "us-west-1",
      "UseFIPS": false,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region us-west-1 with FIPS enabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-fips.us-west-1.amazonaws.com"
      }
    },
    "params": {

```

```

"Region": "us-west-1",
  "UseFIPS": true,
  "UseDualStack": false
}
},
{
  "documentation": "For region us-west-2 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.us-west-2.amazonaws.com"
    }
  },
  "params": {
    "Region": "us-west-2",
    "UseFIPS": false,
    "UseDualStack": false
  }
},
{
  "documentation": "For region us-west-2 with FIPS enabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-fips.us-west-2.amazonaws.com"
    }
  },
  "params": {
    "Region": "us-west-2",
    "UseFIPS": true,
    "UseDualStack": false
  }
},
{
  "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-fips.us-east-1.api.aws"
    }
  },
  "params": {
    "Region": "us-east-1",
    "UseFIPS": true,
    "UseDualStack": true
  }
},
{
  "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",

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    "expect": {
      "endpoint": {
        "url": "https://license-manager.us-east-1.api.aws"
      }
    },
    "params": {
      "Region": "us-east-1",
      "UseFIPS": false,
      "UseDualStack": true
    }
  },
  {
    "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url":
"https://license-manager.cn-north-1.amazonaws.com.cn"
      }
    },
    "params": {
      "Region": "cn-north-1",
      "UseFIPS": false,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region cn-northwest-1 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager.cn-northwest-1.amazonaws.com.cn"
      }
    },
    "params": {
      "Region": "cn-northwest-1",
      "UseFIPS": false,
      "UseDualStack": false
    }
  }
},
{
  "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-fips.cn-north-1.api.amazonwebservices.com.cn"
    }
  },
  "params": {
    "Region": "cn-north-1",

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        "UseFIPS": true,
        "UseDualStack": true
    }
},
{
    "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager-fips.cn-north-1.amazonaws.com.cn"
        }
    },
    "params": {
        "Region": "cn-north-1",
        "UseFIPS": true,
        "UseDualStack": false
    }
},
{
    "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager.cn-north-1.api.amazonwebservices.com.cn"
        }
    },
    "params": {
        "Region": "cn-north-1",
        "UseFIPS": false,
        "UseDualStack": true
    }
},
{
    "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager.us-gov-east-1.amazonaws.com"
        }
    },
    "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": false,
        "UseDualStack": false
    }
},
{
    "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
    "expect": {
        "endpoint": {

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        "url": "https://license-manager-fips.us-gov-east-1.amazonaws.com"
    }
},
"params": {
    "Region": "us-gov-east-1",
    "UseFIPS": true,
    "UseDualStack": false
}
},
{
    "documentation": "For region us-gov-west-1 with FIPS disabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager.us-gov-west-1.amazonaws.com"
        }
    },
    "params": {
        "Region": "us-gov-west-1",
        "UseFIPS": false,
        "UseDualStack": false
    }
},
{
    "documentation":
    "For region us-gov-west-1 with FIPS enabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager-fips.us-gov-west-1.amazonaws.com"
        }
    },
    "params": {
        "Region": "us-gov-west-1",
        "UseFIPS": true,
        "UseDualStack": false
    }
},
{
    "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager-fips.us-gov-east-1.api.aws"
        }
    },
},
"params": {
    "Region": "us-gov-east-1",
    "UseFIPS": true,
    "UseDualStack": true
}

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    }
  },
  {
    "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager.us-gov-east-1.api.aws"
      }
    },
    "params": {
      "Region": "us-gov-east-1",
      "UseFIPS": false,
      "UseDualStack": true
    }
  },
  {
    "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager.us-iso-east-1.c2s.ic.gov"
      }
    },
    "params": {
      "Region": "us-iso-east-1",
      "UseFIPS": false,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
    "expect": {
      "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
    },
    "params": {
      "Region": "us-iso-east-1",
      "UseFIPS": true,
      "UseDualStack": true
    }
  },
  {
    "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-fips.us-iso-east-1.c2s.ic.gov"
      }
    },
    "params": {

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    "Region": "us-iso-east-1",
    "UseFIPS": true,
    "UseDualStack": false
  }
},
{
  "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
  "expect": {
    "error": "DualStack is enabled
but this partition does not support DualStack"
  },
  "params": {
    "Region": "us-iso-east-1",
    "UseFIPS": false,
    "UseDualStack": true
  }
},
{
  "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.us-isob-east-1.sc2s.sgov.gov"
    }
  },
  "params": {
    "Region": "us-isob-east-1",
    "UseFIPS": false,
    "UseDualStack": false
  }
},
{
  "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
  "expect": {
    "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
  },
  "params": {
    "Region": "us-isob-east-1",
    "UseFIPS": true,
    "UseDualStack": true
  }
},
{
  "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-fips.us-isob-east-1.sc2s.sgov.gov"
    }
  }
}

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    },
    "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": true,
        "UseDualStack": false
    }
},
{
    "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
    "expect": {
        "error": "DualStack is enabled but this partition does not support DualStack"
    },
    "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": false,
        "UseDualStack": true
    }
},
{
    "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
    "expect": {
        "endpoint": {
            "url": "https://example.com"
        }
    },
    "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": false,
        "Endpoint": "https://example.com"
    }
},
{
    "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
    "expect": {
        "endpoint": {
            "url": "https://example.com"
        }
    },
    "params": {
        "UseFIPS": false,
        "UseDualStack": false,
        "Endpoint": "https://example.com"
    }
}

```

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    },
    {
      "documentation": "For custom endpoint with fips enabled and dualstack disabled",
      "expect": {
        "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
        "UseDualStack": false,
        "Endpoint": "https://example.com"
      }
    },
    {
      "documentation": "For custom endpoint with fips disabled and dualstack enabled",
      "expect": {
        "error":
"Invalid Configuration: Dualstack and custom endpoint are not supported"
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": true,
        "Endpoint": "https://example.com"
      }
    },
    {
      "documentation": "Missing region",
      "expect": {
        "error": "Invalid Configuration: Missing Region"
      }
    }
  ],
  "version": "1.0"
}
},
"com.amazonaws.licensemanager#AcceptGrant": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#AcceptGrantRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#AcceptGrantResponse"
  },
  "errors": [
    {

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        "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
        "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
    },
    {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
        "target": "com.amazonaws.licensemanager#ValidationException"
    }
}
],
"traits": {
    "smithy.api#documentation": "<p>Accepts the specified grant.</p>"
}
},
"com.amazonaws.licensemanager#AcceptGrantRequest": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#AcceptGrantResponse": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Grant

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ARN.</p>"
  }
},
"Status": {
  "target": "com.amazonaws.licensemanager#GrantStatus",
  "traits": {
    "smithy.api#documentation": "<p>Grant status.</p>"
  }
},
"Version": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Grant version.</p>"
  }
},
"traits": {
  "smithy.api#output": {}
},
"com.amazonaws.licensemanager#AccessDeniedException": {
  "type": "structure",
  "members": {
    "Message": {
      "target": "com.amazonaws.licensemanager#Message"
    }
  },
  "traits": {
    "aws.protocols#awsQueryError": {
      "code": "ServiceAccessDenied",
      "httpResponseCode": 401
    },
    "smithy.api#documentation": "<p>Access to resource denied.</p>",
    "smithy.api#error": "client",
    "smithy.api#httpError": 401
  }
},
"com.amazonaws.licensemanager#ActivationOverrideBehavior": {
  "type": "enum",
  "members": {
    "DISTRIBUTED_GRANTS_ONLY": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "DISTRIBUTED_GRANTS_ONLY"
      }
    },
    "ALL_GRANTS_PERMITTED_BY_ISSUER": {

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        "target": "smithy.api#Unit",
        "traits": {
            "smithy.api#enumValue": "ALL_GRANTS_PERMITTED_BY_ISSUER"
        }
    }
},
"com.amazonaws.licensemanager#AllowedOperation": {
    "type": "enum",
    "members": {
        "CREATE_GRANT": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "CreateGrant"
            }
        },
        "CHECKOUT_LICENSE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "CheckoutLicense"
            }
        },
        "CHECKOUT_BORROW_LICENSE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "CheckoutBorrowLicense"
            }
        },
        "CHECK_IN_LICENSE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "CheckInLicense"
            }
        },
        "EXTEND_CONSUMPTION_LICENSE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "ExtendConsumptionLicense"
            }
        },
        "LIST_PURCHASED_LICENSES": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "ListPurchasedLicenses"
            }
        }
    }
},

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    "CREATE_TOKEN": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "CreateToken"
      }
    }
  },
  "com.amazonaws.licensemanager#AllowedOperationList": {
    "type": "list",
    "member": {
      "target": "com.amazonaws.licensemanager#AllowedOperation"
    },
    "traits": {
      "smithy.api#length": {
        "min": 1,
        "max":
7
      }
    }
  },
  "com.amazonaws.licensemanager#Arn": {
    "type": "string",
    "traits": {
      "smithy.api#length": {
        "min": 0,
        "max": 2048
      },
      "smithy.api#pattern": "^arn:aws(-(cn|us-gov|iso-b|iso-c|iso-d))?:[A-Za-z0-9][A-Za-z0-9_/.-]{0,62}:[A-Za-
z0-9_/.-]{0,63}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9][A-Za-z0-9:/_+=,@.-]{0,1023}$"
    }
  },
  "com.amazonaws.licensemanager#ArnList": {
    "type": "list",
    "member": {
      "target": "com.amazonaws.licensemanager#Arn"
    }
  },
  "com.amazonaws.licensemanager#AuthorizationException": {
    "type": "structure",
    "members": {
      "Message": {
        "target": "com.amazonaws.licensemanager#Message"
      }
    },
    "traits": {
      "aws.protocols#awsQueryError":

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{
  "code": "AuthorizationFailure",
  "httpResponseCode": 403
},
"smithy.api#documentation": "<p>The Amazon Web Services user account does not have permission to
perform the action. Check the IAM\n      policy associated with this account.</p>",
"smithy.api#error": "client",
"smithy.api#httpError": 403
}
},
"com.amazonaws.licensemanager#AutomatedDiscoveryInformation": {
  "type": "structure",
  "members": {
    "LastRunTime": {
      "target": "com.amazonaws.licensemanager#DateTime",
      "traits": {
        "smithy.api#documentation": "<p>Time that automated discovery last ran.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Describes automated discovery.</p>"
  }
},
"com.amazonaws.licensemanager#Boolean": {
  "type": "boolean",
  "traits": {
    "smithy.api#default": false
  }
},
"com.amazonaws.licensemanager#BorrowConfiguration": {
  "type": "structure",
  "members": {
    "AllowEarlyCheckIn": {
      "target": "com.amazonaws.licensemanager#BoxBoolean",
      "traits": {
        "smithy.api#documentation": "<p>Indicates whether early check-ins are allowed.</p>",
        "smithy.api#required": {}
      }
    }
  },
  "MaxTimeToLiveInMinutes": {
    "target": "com.amazonaws.licensemanager#BoxInteger",
    "traits": {
      "smithy.api#documentation": "<p>Maximum time for the borrow configuration, in minutes.</p>",
      "smithy.api#required": {}
    }
  }
}

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},
  "traits": {
    "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
  }
},
"com.amazonaws.licensemanager#BoxBoolean": {
  "type": "boolean"
},
"com.amazonaws.licensemanager#BoxInteger": {
  "type": "integer"
},
"com.amazonaws.licensemanager#BoxLong": {
  "type": "long"
},
"com.amazonaws.licensemanager#CheckInLicense": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#CheckInLicenseRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#CheckInLicenseResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    }
  ],
  {
    "target": "com.amazonaws.licensemanager#ConflictException"
  },
  {
    "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
  },
  {
    "target": "com.amazonaws.licensemanager#RateLimitExceededException"
  },
  {
    "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
  },
  {
    "target": "com.amazonaws.licensemanager#ServerInternalException"
  },
  {
    "target": "com.amazonaws.licensemanager#ValidationException"
  }
}

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    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Checks in the specified license. Check in a license when it is no longer
in use.</p>"
  }
},
"com.amazonaws.licensemanager#CheckInLicenseRequest":
{
  "type": "structure",
  "members": {
    "LicenseConsumptionToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>License consumption token.</p>",
        "smithy.api#required": {}
      }
    },
    "Beneficiary": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>License beneficiary.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#CheckInLicenseResponse": {
  "type": "structure",
  "members": {},
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#CheckoutBorrowLicense":
{
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    }
  ]
}

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    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#EntitlementNotAllowedException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
    },
    {
      "target":
"com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#RedirectException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Checks out the specified license for offline use.</p>"
  }
},
"com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest": {
  "type": "structure",
  "members":
{
  "LicenseArn": {
    "target": "com.amazonaws.licensemanager#Arn",
    "traits": {
      "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license. The license must
use the borrow consumption configuration.</p>",
      "smithy.api#required": {}
    }
  }
}

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    },
    "Entitlements": {
      "target": "com.amazonaws.licensemanager#EntitlementDataList",
      "traits": {
        "smithy.api#documentation": "<p>License entitlements. Partial checkouts are not supported.</p>",
        "smithy.api#required": {}
      }
    },
    "DigitalSignatureMethod": {
      "target": "com.amazonaws.licensemanager#DigitalSignatureMethod",
      "traits": {
        "smithy.api#documentation": "<p>Digital signature method. The possible value is JSON Web Signature (JWS) algorithm PS384.<br>For more information, see <a href=\"https://tools.ietf.org/html/rfc7518#section-3.5\">RFC 7518 Digital Signature with RSASSA-PSS</a>.</p>",
        "smithy.api#required": {}
      }
    },
    "NodeId": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Node ID.</p>"
      }
    },
    "CheckoutMetadata": {
      "target": "com.amazonaws.licensemanager#MetadataList",
      "traits": {
        "smithy.api#documentation": "<p>Information about constraints.</p>"
      }
    },
    "ClientToken": {
      "target": "com.amazonaws.licensemanager#ClientToken",
      "traits": {
        "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
        "smithy.api#required": {}
      }
    },
    "traits": {
      "smithy.api#input": {}
    }
  },
  "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse": {
    "type": "structure",
    "members": {
      "LicenseArn": {
        "target": "com.amazonaws.licensemanager#Arn",
        "traits": {

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    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
  }
},
"LicenseConsumptionToken": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>License consumption token.</p>"
  }
},
"EntitlementsAllowed":
{
  "target": "com.amazonaws.licensemanager#EntitlementDataList",
  "traits": {
    "smithy.api#documentation": "<p>Allowed license entitlements.</p>"
  }
},
"NodeId": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Node ID.</p>"
  }
},
"SignedToken": {
  "target": "com.amazonaws.licensemanager#SignedToken",
  "traits": {
    "smithy.api#documentation": "<p>Signed token.</p>"
  }
},
"IssuedAt": {
  "target": "com.amazonaws.licensemanager#ISO8601DateTime",
  "traits": {
    "smithy.api#documentation": "<p>Date and time at which the license checkout
is issued.</p>"
  }
},
"Expiration": {
  "target": "com.amazonaws.licensemanager#ISO8601DateTime",
  "traits": {
    "smithy.api#documentation": "<p>Date and time at which the license checkout expires.</p>"
  }
},
"CheckoutMetadata": {
  "target": "com.amazonaws.licensemanager#MetadataList",
  "traits": {
    "smithy.api#documentation": "<p>Information about constraints.</p>"
  }
}
},

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"traits": {
  "smithy.api#output": {}
},
},
"com.amazonaws.licensemanager#CheckoutLicense": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#CheckoutLicenseRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#CheckoutLicenseResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#RedirectException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
    },
    {
      "target":
"com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Checks out the specified license.</p>\n    <note>\n    <p>If the
account that created the license is the same that is performing the check out, you must\n    specify the account

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as the beneficiary.</p>\n    </note>"
    }
  },
  "com.amazonaws.licensemanager#CheckoutLicenseRequest": {
    "type": "structure",
    "members": {
      "ProductSKU": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Product
SKU.</p>",
          "smithy.api#required": {}
        }
      },
      "CheckoutType": {
        "target": "com.amazonaws.licensemanager#CheckoutType",
        "traits": {
          "smithy.api#documentation": "<p>Checkout type.</p>",
          "smithy.api#required": {}
        }
      },
      "KeyFingerprint": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Key fingerprint identifying the license.</p>",
          "smithy.api#required": {}
        }
      },
      "Entitlements": {
        "target": "com.amazonaws.licensemanager#EntitlementDataList",
        "traits": {
          "smithy.api#documentation": "<p>License entitlements.</p>",
          "smithy.api#required": {}
        }
      },
      "ClientToken": {
        "target": "com.amazonaws.licensemanager#ClientToken",
        "traits": {
          "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",
          "smithy.api#required": {}
        }
      },
      "Beneficiary": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>License beneficiary.</p>"
        }
      }
    }
  }
}

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    }
  },
  "NodeId": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Node ID.</p>"
    }
  }
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CheckoutLicenseResponse": {
  "type": "structure",
  "members": {
    "CheckoutType": {
      "target": "com.amazonaws.licensemanager#CheckoutType",
      "traits": {
        "smithy.api#documentation": "<p>Checkout type.</p>"
      }
    },
    "LicenseConsumptionToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>License consumption token.</p>"
      }
    },
    "EntitlementsAllowed": {
      "target": "com.amazonaws.licensemanager#EntitlementDataList",
      "traits": {
        "smithy.api#documentation": "<p>Allowed license entitlements.</p>"
      }
    },
    "SignedToken": {
      "target": "com.amazonaws.licensemanager#SignedToken",
      "traits": {
        "smithy.api#documentation": "<p>Signed token.</p>"
      }
    },
    "NodeId": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Node ID.</p>"
      }
    },
    "IssuedAt": {

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    "target": "com.amazonaws.licensemanager#ISO8601DateTime",
    "traits": {
      "smithy.api#documentation": "<p>Date and time at which the license checkout is issued.</p>"
    }
  },
  "Expiration": {
    "target": "com.amazonaws.licensemanager#ISO8601DateTime",
    "traits": {
      "smithy.api#documentation": "<p>Date and
time at which the license checkout expires.</p>"
    }
  },
  "LicenseArn": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the checkout license.</p>"
    }
  },
  "traits": {
    "smithy.api#output": {}
  },
  "com.amazonaws.licensemanager#CheckoutType": {
    "type": "enum",
    "members": {
      "PROVISIONAL": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "PROVISIONAL"
        }
      },
      "PERPETUAL": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "PERPETUAL"
        }
      }
    }
  },
  "com.amazonaws.licensemanager#ClientRequestToken": {
    "type": "string",
    "traits": {
      "smithy.api#length": {
        "min": 1,
        "max": 36
      }
    }
  }
}

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    },
    "com.amazonaws.licensemanager#ClientToken": {
      "type": "string",
      "traits": {
        "smithy.api#length": {
          "min": 0,
          "max": 2048
        },
        "smithy.api#pattern": "^\\S+$"
      }
    },
    "com.amazonaws.licensemanager#ConflictException": {
      "type": "structure",
      "members": {
        "Message": {
          "target": "com.amazonaws.licensemanager#Message"
        }
      },
      "traits": {
        "aws.protocols#awsQueryError": {
          "code": "ConflictException",
          "httpResponseCode":
409
        },
        "smithy.api#documentation": "<p>There was a conflict processing the request. Try your request
again.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 409
      }
    },
    "com.amazonaws.licensemanager#ConsumedLicenseSummary": {
      "type": "structure",
      "members": {
        "ResourceType": {
          "target": "com.amazonaws.licensemanager#ResourceType",
          "traits": {
            "smithy.api#documentation": "<p>Resource type of the resource consuming a license.</p>"
          }
        },
        "ConsumedLicenses": {
          "target": "com.amazonaws.licensemanager#BoxLong",
          "traits": {
            "smithy.api#documentation": "<p>Number of licenses consumed by the resource.</p>"
          }
        }
      }
    },
  },

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"traits": {
  "smithy.api#documentation": "<p>Details about license consumption.</p>"
}
},
"com.amazonaws.licensemanager#ConsumedLicenseSummaryList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#ConsumedLicenseSummary"
  }
},
"com.amazonaws.licensemanager#ConsumptionConfiguration": {
  "type": "structure",
  "members": {
    "RenewType": {
      "target": "com.amazonaws.licensemanager#RenewType",
      "traits": {
        "smithy.api#documentation": "<p>Renewal frequency.</p>"
      }
    },
    "ProvisionalConfiguration": {
      "target": "com.amazonaws.licensemanager#ProvisionalConfiguration",
      "traits": {
        "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
      }
    },
    "BorrowConfiguration": {
      "target": "com.amazonaws.licensemanager#BorrowConfiguration",
      "traits": {
        "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Details about a consumption configuration.</p>"
  }
},
"com.amazonaws.licensemanager#CreateGrant": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#CreateGrantRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#CreateGrantResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    }
  ],

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    {
      "target":
"com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Creates a grant for the specified license. A grant shares the use of
license\n entitlements with a specific Amazon Web Services account, an organization, or an\n
organizational unit (OU). For more
information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-
licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
  }
},
"com.amazonaws.licensemanager#CreateGrantRequest": {
  "type": "structure",
  "members": {
    "ClientToken": {
      "target": "com.amazonaws.licensemanager#ClientToken",
      "traits": {
        "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",
        "smithy.api#required": {}
      }
    },
    "GrantName": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Grant name.</p>",
        "smithy.api#required": {}
      }
    }
  }
},
"LicenseArn": {

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    "target": "com.amazonaws.licensemanager#Arn",
    "traits": {
      "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
      "smithy.api#required": {}
    }
  },
  "Principals": {
    "target": "com.amazonaws.licensemanager#PrincipalArnList",
    "traits": {
      "smithy.api#documentation": "<p>The grant principals. You can specify one of the following as an Amazon Resource Name (ARN):</p>\n  <ul>\n    <li>\n      <p>An Amazon Web Services account, which includes only the account specified.</p>\n    </li>\n    <ul>\n      <li>\n        <p>An organizational unit (OU), which includes all accounts in the OU.</p>\n      </li>\n    </ul>\n    <li>\n      <p>An organization, which will include all accounts across your organization.</p>\n    </li>\n  </ul>",
      "smithy.api#required": {}
    }
  },
  "HomeRegion": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Home Region of the grant.</p>",
      "smithy.api#required": {}
    }
  },
  "AllowedOperations": {
    "target": "com.amazonaws.licensemanager#AllowedOperationList",
    "traits": {
      "smithy.api#documentation": "<p>Allowed operations for the grant.</p>",
      "smithy.api#required": {}
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},

"com.amazonaws.licensemanager#CreateGrantResponse": {
  "type": "structure",
  "members": {
    "GrantArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>Grant ARN.</p>"
      }
    }
  },
}

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    "Status": {
      "target": "com.amazonaws.licensemanager#GrantStatus",
      "traits": {
        "smithy.api#documentation": "<p>Grant status.</p>"
      }
    },
    "Version": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Grant version.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#CreateGrantVersion":
{
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#CreateGrantVersionRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#CreateGrantVersionResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ]
}

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    ],
    "traits": {
      "smithy.api#documentation": "<p>Creates a new version of the specified grant. For more information,
see\n    <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-
licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
    }
  },
  "com.amazonaws.licensemanager#CreateGrantVersionRequest": {
    "type": "structure",
    "members": {
      "ClientToken": {
        "target": "com.amazonaws.licensemanager#ClientToken",
        "traits": {
          "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",
        }
      }
    },
    "smithy.api#required": {}
  },
  "GrantArn": {
    "target": "com.amazonaws.licensemanager#Arn",
    "traits": {
      "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
      "smithy.api#required": {}
    }
  },
  "GrantName": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Grant name.</p>"
    }
  },
  "AllowedOperations": {
    "target": "com.amazonaws.licensemanager#AllowedOperationList",
    "traits": {
      "smithy.api#documentation": "<p>Allowed operations for the grant.</p>"
    }
  },
  "Status": {
    "target": "com.amazonaws.licensemanager#GrantStatus",
    "traits": {
      "smithy.api#documentation": "<p>Grant status.</p>"
    }
  },
  "StatusReason": {
    "target": "com.amazonaws.licensemanager#StatusReasonMessage",
    "traits": {
      "smithy.api#documentation": "<p>Grant status reason.</p>"
    }
  }
}

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    }
  },
  "SourceVersion": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Current version of the grant.</p>"
    }
  },
  "Options": {
    "target": "com.amazonaws.licensemanager#Options",
    "traits": {
      "smithy.api#documentation": "<p>The options specified for the grant.</p>"
    }
  }
},
"traits": {
  "smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateGrantVersionResponse": {
  "type": "structure",
  "members": {
    "GrantArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>Grant ARN.</p>"
      }
    },
    "Status": {
      "target": "com.amazonaws.licensemanager#GrantStatus",
      "traits": {
        "smithy.api#documentation": "<p>Grant status.</p>"
      }
    },
    "Version": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>New version of the grant.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#CreateLicense": {
  "type": "operation",

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"input": {
  "target": "com.amazonaws.licensemanager#CreateLicenseRequest"
},
"output": {
  "target": "com.amazonaws.licensemanager#CreateLicenseResponse"
},
"errors": [
  {
    "target": "com.amazonaws.licensemanager#AccessDeniedException"
  },
  {
    "target": "com.amazonaws.licensemanager#AuthorizationException"
  },
  {
    "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
  },
  {
    "target": "com.amazonaws.licensemanager#RateLimitExceededException"
  },
  {
    "target": "com.amazonaws.licensemanager#RedirectException"
  },
  {
    "target": "com.amazonaws.licensemanager#ServerInternalException"
  },
  {
    "target": "com.amazonaws.licensemanager#ValidationException"
  }
],
"traits": {
  "smithy.api#documentation": "<p>Creates a license.</p>"
}
},
"com.amazonaws.licensemanager#CreateLicenseConfiguration": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    }
  ]
}

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    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Creates a license configuration.</p>\n    <p>A license configuration is an abstraction of a customer license agreement that can be\n    consumed and enforced by License Manager. Components include specifications for the license\n    type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n    Dedicated Instance, Dedicated Host, or all of these), license affinity to host (how long a \n    license must be associated with a host), and the number of licenses purchased and used.</p>"
  }
},
"com.amazonaws.licensemanager#CreateLicenseConfigurationRequest": {
  "type": "structure",
  "members": {
    "Name": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Name of the license configuration.</p>",
        "smithy.api#required": {}
      }
    },
    "Description": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Description of the license configuration.</p>"
      }
    }
  },
  "LicenseCountingType": {
    "target": "com.amazonaws.licensemanager#LicenseCountingType",
    "traits": {
      "smithy.api#documentation": "<p>Dimension used to track the license inventory.</p>",
      "smithy.api#required": {}
    }
  },
  "LicenseCount": {
    "target": "com.amazonaws.licensemanager#BoxLong",

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    "traits": {
      "smithy.api#documentation": "<p>Number of licenses managed by the license configuration.</p>"
    }
  },
  "LicenseCountHardLimit": {
    "target": "com.amazonaws.licensemanager#BoxBoolean",
    "traits": {
      "smithy.api#documentation": "<p>Indicates whether hard or soft license enforcement is used. Exceeding a hard limit\n      blocks the launch of new instances.</p>"
    }
  },
  "LicenseRules": {
    "target":
      "com.amazonaws.licensemanager#StringList",
    "traits": {
      "smithy.api#documentation": "<p>License rules. The syntax is #name=value (for example, #allowedTenancy=EC2-DedicatedHost). The available rules \n      vary by dimension, as follows.</p>\n      <ul>\n        <li>\n          <p>\n            <code>Cores</code> dimension: <code>allowedTenancy</code> |\n            <code>licenseAffinityToHost</code> |\n            <code>maximumCores</code> |\n            <code>minimumCores</code>\n          </p>\n        </li>\n        <li>\n          <p>\n            <code>Instances</code> dimension: <code>allowedTenancy</code> |\n            <code>maximumCores</code> |\n            <code>minimumCores</code> |\n            <code>maximumSockets</code> | <code>minimumSockets</code> |\n            <code>maximumVcpus</code> | <code>minimumVcpus</code>\n          </p>\n        </li>\n        <li>\n          <p>\n            <code>Sockets</code> dimension: <code>allowedTenancy</code> |\n            <code>licenseAffinityToHost</code> |\n            <code>maximumSockets</code> |\n            <code>minimumSockets</code>\n          </p>\n        </li>\n        <li>\n          <p>\n            <code>vCPUs</code> dimension: <code>allowedTenancy</code> |\n            <code>honorVcpuOptimization</code> |\n            <code>maximumVcpus</code> |\n            <code>minimumVcpus</code>\n          </p>\n        </li>\n      </ul>\n      <p>The unit for <code>licenseAffinityToHost</code> is days and the range is 1 to 180. The possible \n      values for <code>allowedTenancy</code> are <code>EC2-Default</code>, <code>EC2-DedicatedHost</code>, and \n      <code>EC2-DedicatedInstance</code>. The possible values for <code>honorVcpuOptimization</code> are \n      <code>True</code> and <code>False</code>.</p>"
    }
  },
  "Tags": {
    "target": "com.amazonaws.licensemanager#TagList",
    "traits": {
      "smithy.api#documentation": "<p>Tags to add to the license configuration.</p>"
    }
  },
  "DisassociateWhenNotFound": {
    "target": "com.amazonaws.licensemanager#BoxBoolean",
    "traits": {
      "smithy.api#documentation": "<p>When true, disassociates a resource when software is\n      uninstalled.</p>"
    }
  }
}

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    }
  },
  "ProductInformationList": {
    "target": "com.amazonaws.licensemanager#ProductInformationList",
    "traits": {
      "smithy.api#documentation": "<p>Product information.</p>"
    }
  }
},
"traits": {
  "smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseConfigurationResponse":
{
  "type": "structure",
  "members": {
    "LicenseConfigurationArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    }
  ]
}

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    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Creates a new license conversion task.</p>"
  }
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest": {
  "type": "structure",
  "members": {
    "ResourceArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource you are converting the license type for.</p>",
        "smithy.api#required": {}
      }
    },
    "SourceLicenseContext": {
      "target": "com.amazonaws.licensemanager#LicenseConversionContext",
      "traits": {
        "smithy.api#documentation": "<p>Information that identifies the license type you are converting from. \n\n For the structure of the source license, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/conversion-procedures.html#conversion-cli\">Convert a license type using the CLI </a> in the <i>License Manager User Guide</i>.</p>",
        "smithy.api#required": {}
      }
    },
    "DestinationLicenseContext": {
      "target": "com.amazonaws.licensemanager#LicenseConversionContext",
      "traits": {
        "smithy.api#documentation": "<p>Information that identifies the license type you are converting to. For the structure of the destination license, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/conversion-procedures.html#conversion-cli\">Convert a license type using the CLI </a> in the <i>License Manager User Guide</i>.</p>",
        "smithy.api#required": {}
      }
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
}

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    }
  },
  "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse": {
    "type": "structure",
    "members": {
      "LicenseConversionTaskId": {
        "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",

        "traits": {
          "smithy.api#documentation": "<p>The ID of the created license type conversion task.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
      },
      {

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        "target": "com.amazonaws.licensemanager#ValidationException"
    }
],
"traits": {
    "smithy.api#documentation": "<p>Creates a report generator.</p>"
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest": {
    "type": "structure",
    "members": {
        "ReportGeneratorName":
    {
        "target": "com.amazonaws.licensemanager#ReportGeneratorName",
        "traits": {
            "smithy.api#documentation": "<p>Name of the report generator.</p>",
            "smithy.api#required": {}
        }
    },
    "Type": {
        "target": "com.amazonaws.licensemanager#ReportTypeList",
        "traits": {
            "smithy.api#documentation": "<p>Type of reports to generate. The following report types an be
generated:</p>\n    <ul>\n        <li>\n            <p>License configuration report - Reports the number and
details of consumed licenses for a license configuration.</p>\n        </li>\n        <li>\n            <p>Resource
report - Reports the tracked licenses and resource consumption for a license configuration.</p>\n        </li>\n
</ul>",
            "smithy.api#required": {}
        }
    }
},
"ReportContext": {
    "target": "com.amazonaws.licensemanager#ReportContext",
    "traits": {
        "smithy.api#documentation": "<p>Defines the type of license configuration the report generator
tracks.</p>",
        "smithy.api#required": {}
    }
},
"ReportFrequency": {
    "target": "com.amazonaws.licensemanager#ReportFrequency",
    "traits": {
        "smithy.api#documentation": "<p>Frequency by which reports are generated. Reports can be
generated daily, monthly, or weekly.</p>",
        "smithy.api#required": {}
    }
},
"ClientToken": {
    "target": "com.amazonaws.licensemanager#ClientRequestToken",

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    "traits": {
      "smithy.api#documentation": "<p>Unique,
case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
      "smithy.api#required": {}
    }
  },
  "Description": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Description of the report generator.</p>"
    }
  },
  "Tags": {
    "target": "com.amazonaws.licensemanager#TagList",
    "traits": {
      "smithy.api#documentation": "<p>Tags to add to the report generator.</p>"
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse": {
  "type": "structure",
  "members": {
    "LicenseManagerReportGeneratorArn":
    {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the new report
generator.</p>"
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#CreateLicenseRequest": {
    "type": "structure",
    "members": {
      "LicenseName": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>License name.</p>",
          "smithy.api#required": {}
        }
      }
    }
  }
}

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    },
    "ProductName": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Product
name.</p>",
        "smithy.api#required": {}
      }
    },
    "ProductSKU": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Product SKU.</p>",
        "smithy.api#required": {}
      }
    },
    "Issuer": {
      "target": "com.amazonaws.licensemanager#Issuer",
      "traits": {
        "smithy.api#documentation": "<p>License issuer.</p>",
        "smithy.api#required": {}
      }
    },
    "HomeRegion": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Home Region for the license.</p>",
        "smithy.api#required": {}
      }
    }
  },
  "Validity": {
    "target": "com.amazonaws.licensemanager#DatetimeRange",
    "traits": {
      "smithy.api#documentation": "<p>Date and time range during which the license is valid, in ISO8601-
UTC format.</p>",
      "smithy.api#required": {}
    }
  },
  "Entitlements": {
    "target": "com.amazonaws.licensemanager#EntitlementList",
    "traits": {
      "smithy.api#documentation": "<p>License entitlements.</p>",
      "smithy.api#required": {}
    }
  },
  "Beneficiary": {
    "target": "com.amazonaws.licensemanager#String",

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    "traits": {
      "smithy.api#documentation": "<p>License beneficiary.</p>",
      "smithy.api#required": {}
    }
  },
  "ConsumptionConfiguration": {
    "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
    "traits": {
      "smithy.api#documentation": "<p>Configuration for consumption of the license. Choose a provisional configuration for workloads\n      running with continuous connectivity. Choose a borrow configuration for workloads with offline\n      usage.</p>",
      "smithy.api#required": {}
    }
  },
  "LicenseMetadata": {
    "target": "com.amazonaws.licensemanager#MetadataList",
    "traits": {
      "smithy.api#documentation": "<p>Information about the license.</p>"
    }
  },
  "ClientToken": {
    "target": "com.amazonaws.licensemanager#ClientToken",
    "traits": {
      "smithy.api#documentation":
"<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
      "smithy.api#required": {}
    }
  }
},
"traits": {
  "smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseResponse": {
  "type": "structure",
  "members": {
    "LicenseArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
      }
    },
    "Status": {
      "target": "com.amazonaws.licensemanager#LicenseStatus",
      "traits": {
        "smithy.api#documentation": "<p>License status.</p>"
      }
    }
  },
}

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"Version": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>License version.</p>"
  }
},
"traits": {
  "smithy.api#output": {}
},
"com.amazonaws.licensemanager#CreateLicenseVersion": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#CreateLicenseVersionRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#CreateLicenseVersionResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#ConflictException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#RedirectException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Creates a new version of the specified license.</p>"
  }
}

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    },
    "com.amazonaws.licensemanager#CreateLicenseVersionRequest": {
      "type": "structure",
      "members": {
        "LicenseArn": {
          "target":
"com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
            "smithy.api#required": {}
          }
        },
        "LicenseName": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>License name.</p>",
            "smithy.api#required": {}
          }
        },
        "ProductName": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Product name.</p>",
            "smithy.api#required": {}
          }
        },
        "Issuer": {
          "target": "com.amazonaws.licensemanager#Issuer",
          "traits": {
            "smithy.api#documentation": "<p>License issuer.</p>",
            "smithy.api#required": {}
          }
        },
        "HomeRegion": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Home Region of the license.</p>",
            "smithy.api#required": {}
          }
        },
        "Validity": {
          "target": "com.amazonaws.licensemanager#DatetimeRange",
          "traits": {
            "smithy.api#documentation": "<p>Date and time range during which the license is valid, in ISO8601-
UTC format.</p>",
            "smithy.api#required": {}
          }
        }
      }
    }
  }

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    },
    "LicenseMetadata": {
      "target": "com.amazonaws.licensemanager#MetadataList",
      "traits": {
        "smithy.api#documentation": "<p>Information about the license.</p>"
      }
    },
    "Entitlements": {
      "target": "com.amazonaws.licensemanager#EntitlementList",
      "traits": {
        "smithy.api#documentation": "<p>License entitlements.</p>",
        "smithy.api#required": {}
      }
    },
    "ConsumptionConfiguration": {
      "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
      "traits": {
        "smithy.api#documentation": "<p>Configuration for consumption of the license. Choose a provisional
configuration for workloads\n    running with continuous connectivity. Choose a borrow configuration for
workloads with offline\n    usage.</p>",
        "smithy.api#required": {}
      }
    },
    "Status": {
      "target": "com.amazonaws.licensemanager#LicenseStatus",
      "traits": {
        "smithy.api#documentation": "<p>License status.</p>",
        "smithy.api#required": {}
      }
    },
    "ClientToken": {
      "target": "com.amazonaws.licensemanager#ClientToken",
      "traits": {
        "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",
        "smithy.api#required": {}
      }
    },
    "SourceVersion": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Current version of the license.</p>"
      }
    }
  },
  "traits": {

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"smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#CreateLicenseVersionResponse": {
  "type": "structure",
  "members": {
    "LicenseArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>License ARN.</p>"
      }
    },
    "Version": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>New version of the license.</p>"
      }
    },
    "Status": {
      "target": "com.amazonaws.licensemanager#LicenseStatus",
      "traits": {
        "smithy.api#documentation": "<p>License status.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#CreateToken": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#CreateTokenRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#CreateTokenResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    }
  ],

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    {
      "target": "com.amazonaws.licensemanager#RedirectException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Creates a long-lived token.</p>\n    <p>A refresh token is a JWT token used to get an access token. With an access token,\n    you can call AssumeRoleWithWebIdentity to get role credentials that you can use to \n    call License Manager to manage the specified license.</p>"
  },
  "com.amazonaws.licensemanager#CreateTokenRequest": {
    "type": "structure",
    "members": {
      "LicenseArn": {
        "target": "com.amazonaws.licensemanager#Arn",
        "traits": {
          {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license. The ARN is mapped to the aud claim of the\n    JWT token.</p>",
            "smithy.api#required": {}
          }
        },
        "RoleArns": {
          "target": "com.amazonaws.licensemanager#ArnList",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the IAM roles to embed in the token. \n    License Manager does not check whether the roles are in use.</p>"
          }
        },
        "ExpirationInDays": {
          "target": "com.amazonaws.licensemanager#Integer",
          "traits": {
            "smithy.api#documentation": "<p>Token expiration, in days, counted from token creation. The default is 365 days.</p>"
          }
        }
      }
    }
  }
}

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    },
    "TokenProperties": {
      "target": "com.amazonaws.licensemanager#MaxSize3StringList",
      "traits": {
        "smithy.api#documentation": "<p>Data specified by the caller to be included in the JWT token. The
data is mapped\n      to the amr claim of the JWT token.</p>"
      }
    },
    "ClientToken": {
      "target": "com.amazonaws.licensemanager#ClientToken",
      "traits": {
        "smithy.api#documentation": "<p>Idempotency token, valid for 10 minutes.</p>",
        "smithy.api#required": {}
      }
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#CreateTokenResponse": {
  "type": "structure",
  "members": {
    "TokenId": {
      "target": "com.amazonaws.licensemanager#String",

      "traits": {
        "smithy.api#documentation": "<p>Token ID.</p>"
      }
    },
    "TokenType": {
      "target": "com.amazonaws.licensemanager#TokenType",
      "traits": {
        "smithy.api#documentation": "<p>Token type.</p>"
      }
    }
  },
  "Token": {
    "target": "com.amazonaws.licensemanager#TokenString",
    "traits": {
      "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>"
    }
  }
},
"traits": {
  "smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#DateTime": {

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    "type": "timestamp"
  },
  "com.amazonaws.licensemanager#DatetimeRange": {
    "type": "structure",
    "members": {
      "Begin": {
        "target": "com.amazonaws.licensemanager#ISO8601DateTime",
        "traits": {
          "smithy.api#documentation": "<p>Start of the time range.</p>",
          "smithy.api#required": {}
        }
      },
      "End": {
        "target": "com.amazonaws.licensemanager#ISO8601DateTime",
        "traits": {
          "smithy.api#documentation": "<p>End of the time range.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#documentation": "<p>Describes a time range, in ISO8601-UTC format.</p>"
    }
  },
  "com.amazonaws.licensemanager#DeleteGrant": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#DeleteGrantRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#DeleteGrantResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
      },
      {

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        "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
        "target": "com.amazonaws.licensemanager#ValidationException"
    }
],
"traits": {
    "smithy.api#documentation": "<p>Deletes
the specified grant.</p>"
}
},
"com.amazonaws.licensemanager#DeleteGrantRequest": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                "smithy.api#required": {}
            }
        },
        "StatusReason": {
            "target": "com.amazonaws.licensemanager#StatusReasonMessage",
            "traits": {
                "smithy.api#documentation": "<p>The Status reason for the delete request.</p>"
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Current version of the
grant.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#DeleteGrantResponse": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
        }
    }
}

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    },
    "Status": {
      "target": "com.amazonaws.licensemanager#GrantStatus",
      "traits": {
        "smithy.api#documentation": "<p>Grant status.</p>"
      }
    },
    "Version": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation":
"<p>Grant version.</p>"
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#DeleteLicense": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#DeleteLicenseRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#DeleteLicenseResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#ConflictException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      }
    ]
  },
  {
    "target": "com.amazonaws.licensemanager#RateLimitExceededException"
  },
  {
    "target": "com.amazonaws.licensemanager#RedirectException"
  },
  {

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        "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
        "target": "com.amazonaws.licensemanager#ValidationException"
    }
],
"traits": {
    "smithy.api#documentation": "<p>Deletes the specified license.</p>"
}
},
"com.amazonaws.licensemanager#DeleteLicenseConfiguration": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse"
    },
}

"errors": [
    {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
    }
],
"traits": {
    "smithy.api#documentation": "<p>Deletes the specified license configuration.</p>\n    <p>You cannot delete a license configuration that is in use.</p>"
}
},
"com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest": {
    "type": "structure",
    "members":
{
    "LicenseConfigurationArn": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {

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        "smithy.api#documentation": "<p>ID of the license configuration.</p>",
        "smithy.api#required": {}
    }
}
},
"traits": {
    "smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse": {
    "type": "structure",
    "members": {},
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ]
}

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    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Deletes the specified report generator.</p>\n    <p>This action
deletes the report generator, which stops it from generating future reports.\n    The action cannot be reversed. It
has no effect on the previous reports from this generator.</p>"
  }
},
"com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest": {
  "type": "structure",
  "members": {
    "LicenseManagerReportGeneratorArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator to be
deleted.</p>",
        "smithy.api#required": {}
      }
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse": {
  "type": "structure",
  "members": {},
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#DeleteLicenseRequest": {
  "type": "structure",
  "members": {
    "LicenseArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
        "smithy.api#required": {}
      }
    }
  },
  "SourceVersion": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Current version of the license.</p>",
      "smithy.api#required": {}
    }
  }
}

```

```

{}
  }
}
},
"traits": {
  "smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteLicenseResponse": {
  "type": "structure",
  "members": {
    "Status": {
      "target": "com.amazonaws.licensemanager#LicenseDeletionStatus",
      "traits": {
        "smithy.api#documentation": "<p>License status.</p>"
      }
    },
    "DeletionDate": {
      "target": "com.amazonaws.licensemanager#ISO8601DateTime",
      "traits": {
        "smithy.api#documentation": "<p>Date when the license is deleted.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#DeleteToken": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#DeleteTokenRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#DeleteTokenResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#RedirectException"
    }
  ]
}

```

```

    },
    {
      "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
  },
  {
    "target": "com.amazonaws.licensemanager#ValidationException"
  }
],
"traits": {
  "smithy.api#documentation": "<p>Deletes the specified token. Must be called in the license home
Region.</p>"
}
},
"com.amazonaws.licensemanager#DeleteTokenRequest": {
  "type": "structure",
  "members": {
    "TokenId": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Token ID.</p>",
        "smithy.api#required": {}
      }
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#DeleteTokenResponse": {
  "type": "structure",
  "members": {},
  "traits": {
    "smithy.api#output": {}
  }
}
},
"com.amazonaws.licensemanager#DigitalSignatureMethod": {
  "type": "enum",
  "members": {
    "JWT_PS384": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "JWT_PS384"
      }
    }
  }
}

```

```

    }
  }
},
"com.amazonaws.licensemanager#Entitlement": {
  "type": "structure",
  "members": {
    "Name": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Entitlement name.</p>",
        "smithy.api#required": {}
      }
    },
    "Value": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Entitlement resource. Use only
if the unit is None.</p>"
      }
    },
    "MaxCount": {
      "target": "com.amazonaws.licensemanager#Long",
      "traits": {
        "smithy.api#documentation": "<p>Maximum entitlement count. Use if the unit is not None.</p>"
      }
    },
    "Overage": {
      "target": "com.amazonaws.licensemanager#BoxBoolean",
      "traits": {
        "smithy.api#documentation": "<p>Indicates whether overages are allowed.</p>"
      }
    },
    "Unit": {
      "target": "com.amazonaws.licensemanager#EntitlementUnit",
      "traits": {
        "smithy.api#documentation": "<p>Entitlement unit.</p>",
        "smithy.api#required": {}
      }
    },
    "AllowCheckIn": {
      "target":
"com.amazonaws.licensemanager#BoxBoolean",
      "traits": {
        "smithy.api#documentation": "<p>Indicates whether check-ins are allowed.</p>"
      }
    }
  },
  "traits": {

```



```

    "smithy.api#documentation": "<p>Describes a resource entitled for use with a license.</p>"
  }
},
"com.amazonaws.licensemanager#EntitlementData": {
  "type": "structure",
  "members": {
    "Name": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Entitlement data name.</p>",
        "smithy.api#required": {}
      }
    }
  },
  "Value": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Entitlement
data value.</p>"
    }
  },
  "Unit": {
    "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
    "traits": {
      "smithy.api#documentation": "<p>Entitlement data unit.</p>",
      "smithy.api#required": {}
    }
  }
},
"traits": {
  "smithy.api#documentation": "<p>Data associated with an entitlement resource.</p>"
}
},
"com.amazonaws.licensemanager#EntitlementDataList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#EntitlementData"
  }
},
"com.amazonaws.licensemanager#EntitlementDataUnit": {
  "type": "enum",
  "members": {
    "COUNT": {
      "target": "smithy.api#Unit",
      "traits": {

```

"smithy.api#enumValue": "Count"

```

    }
  },

```

```
"NONE": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "None"
  }
},
"SECONDS": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Seconds"
  }
},
"MICROSECONDS": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Microseconds"
  }
},
"MILLISECONDS": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Milliseconds"
  }
},
"BYTES": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Bytes"
  }
},
"KILOBYTES": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Kilobytes"
  }
},
"MEGABYTES": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Megabytes"
  }
},
"GIGABYTES": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Gigabytes"
  }
},
```

```

"TERABYTES": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Terabytes"
  }
},
"BITS": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Bits"
  }
},
"KILOBITS": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Kilobits"
  }
},
"MEGABITS": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Megabits"
  }
},
"GIGABITS": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Gigabits"
  }
},
"TERABITS": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Terabits"
  }
}
},
"PERCENT": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Percent"
  }
},
"BYTES_PER_SECOND": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Bytes/Second"
  }
}

```

```

    }
  },
  "KILOBYTES_PER_SECOND": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Kilobytes/Second"
    }
  },
  "MEGABYTES_PER_SECOND": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Megabytes/Second"
    }
  },
  "GIGABYTES_PER_SECOND": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Gigabytes/Second"
    }
  },
  "TERABYTES_PER_SECOND": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Terabytes/Second"
    }
  },
  "BITS_PER_SECOND": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Bits/Second"
    }
  },
  "KILOBITS_PER_SECOND": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Kilobits/Second"
    }
  },
  "MEGABITS_PER_SECOND": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue":
" Megabits/Second"
    }
  },
  "GIGABITS_PER_SECOND": {
    "target": "smithy.api#Unit",
    "traits": {

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        "smithy.api#enumValue": "Gigabits/Second"
    }
},
"TERABITS_PER_SECOND": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Terabits/Second"
    }
},
"COUNT_PER_SECOND": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Count/Second"
    }
}
},
"com.amazonaws.licensemanager#EntitlementList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#Entitlement"
    }
},
"com.amazonaws.licensemanager#EntitlementNotAllowedException":
{
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>The entitlement is not allowed.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#EntitlementUnit": {
    "type": "enum",
    "members": {
        "COUNT": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Count"
            }
        },
        "NONE": {
            "target": "smithy.api#Unit",

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```

    "traits": {
      "smithy.api#enumValue": "None"
    }
  },
  "SECONDS": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Seconds"
    }
  },
  "MICROSECONDS": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Microseconds"
    }
  },
  "MILLISECONDS": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Milliseconds"
    }
  },
  "BYTES": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Bytes"
    }
  },
  "KILOBYTES": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Kilobytes"
    }
  },
  "MEGABYTES": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Megabytes"
    }
  },
  "GIGABYTES": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Gigabytes"
    }
  },
  "TERABYTES": {

```

```

    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Terabytes"
    }
  },
  "BITS": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Bits"
    }
  },
  "KILOBITS": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Kilobits"
    }
  },
  "MEGABITS": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Megabits"
    }
  },
  "GIGABITS": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Gigabits"
    }
  },
  "TERABITS": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Terabits"
    }
  },
  "PERCENT": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Percent"
    }
  },
  "BYTES_PER_SECOND": {
    "target":
"smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Bytes/Second"
    }
  }

```

```

    },
    "KILOBYTES_PER_SECOND": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Kilobytes/Second"
      }
    },
    "MEGABYTES_PER_SECOND": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Megabytes/Second"
      }
    },
    "GIGABYTES_PER_SECOND": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Gigabytes/Second"
      }
    },
    "TERABYTES_PER_SECOND": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Terabytes/Second"
      }
    },
    "BITS_PER_SECOND": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Bits/Second"
      }
    },
    "KILOBITS_PER_SECOND": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Kilobits/Second"
      }
    },
    "MEGABITS_PER_SECOND": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Megabits/Second"
      }
    },
    "GIGABITS_PER_SECOND": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Gigabits/Second"
      }
    }
  }

```



```

    }
  },
  "TERABITS_PER_SECOND": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Terabits/Second"
    }
  },
  "COUNT_PER_SECOND": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Count/Second"
    }
  }
},
"com.amazonaws.licensemanager#EntitlementUsage": {
  "type": "structure",
  "members": {
    "Name": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Entitlement usage name.</p>",
        "smithy.api#required": {}
      }
    },
    "ConsumedValue": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Resource usage consumed.</p>",
        "smithy.api#required": {}
      }
    },
    "MaxCount": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Maximum entitlement usage count.</p>"
      }
    },
    "Unit": {
      "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
      "traits": {
        "smithy.api#documentation": "<p>Entitlement usage unit.</p>",
        "smithy.api#required": {}
      }
    }
  }
}

```

```

    },
    "traits": {
      "smithy.api#documentation": "<p>Usage associated with an entitlement resource.</p>"
    }
  },
  "com.amazonaws.licensemanager#EntitlementUsageList":
  {
    "type": "list",
    "member": {
      "target": "com.amazonaws.licensemanager#EntitlementUsage"
    }
  },
  "com.amazonaws.licensemanager#ExtendLicenseConsumption": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
      },
      {
        "target": "com.amazonaws.licensemanager#ValidationException"
      }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Extends the expiration date for license consumption.</p>"
    }
  },
  "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest": {

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```

"type": "structure",
"members": {
  "LicenseConsumptionToken": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>License consumption token.</p>",
      "smithy.api#required": {}
    }
  }
},
"DryRun": {
  "target": "com.amazonaws.licensemanager#Boolean",
  "traits": {
    "smithy.api#default": false,
    "smithy.api#documentation": "<p>Checks whether you have the required permissions for the action, without actually making the request. Provides an error response if you do not have the required permissions.</p>"
  }
},
"traits": {
  "smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse": {
  "type": "structure",
  "members": {
    "LicenseConsumptionToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>License consumption token.</p>"
      }
    }
  },
  "Expiration": {
    "target": "com.amazonaws.licensemanager#ISO8601DateTime",
    "traits": {
      "smithy.api#documentation": "<p>Date and time at which the license consumption expires.</p>"
    }
  }
},
"traits": {
  "smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#FailedDependencyException": {
  "type": "structure",
  "members": {
    "Message": {

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```

    "target": "com.amazonaws.licensemanager#Message"
  },
  "ErrorCode": {
    "target": "com.amazonaws.licensemanager#String"
  }
},
"traits": {
  "aws.protocols#awsQueryError": {
    "code": "FailedDependency",
    "httpResponseCode": 424
  },
  "smithy.api#documentation":
"<p>A dependency required to run the API is missing.</p>",
  "smithy.api#error": "client",
  "smithy.api#httpError": 424
}
},
"com.amazonaws.licensemanager#Filter": {
  "type": "structure",
  "members": {
    "Name": {
      "target": "com.amazonaws.licensemanager#FilterName",
      "traits": {
        "smithy.api#documentation": "<p>Name of the filter. Filter names are case-sensitive.</p>"
      }
    },
    "Values": {
      "target": "com.amazonaws.licensemanager#FilterValues",
      "traits": {
        "smithy.api#documentation": "<p>The value of the filter, which is case-sensitive. You can only
specify one value for the filter.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>A filter
name and value pair that is used to return more specific results from a\n    describe operation. Filters can be used
to match a set of resources by specific criteria,\n    such as tags, attributes, or IDs.</p>"
  }
},
"com.amazonaws.licensemanager#FilterLimitExceededException": {
  "type": "structure",
  "members": {
    "Message": {
      "target": "com.amazonaws.licensemanager#Message"
    }
  },
  "traits": {

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```

    "aws.protocols#awsQueryError": {
      "code": "FilterLimitExceeded",
      "httpResponseCode": 400
    },
    "smithy.api#documentation": "<p>The request uses too many filters or too many filter values.</p>",
    "smithy.api#error": "client",
    "smithy.api#httpError": 400
  }
},
"com.amazonaws.licensemanager#FilterList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#Filter"
  }
},
"com.amazonaws.licensemanager#FilterName": {
  "type": "string"
},
"com.amazonaws.licensemanager#FilterValue": {
  "type": "string"
},
"com.amazonaws.licensemanager#FilterValues": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#FilterValue",
    "traits": {
      "smithy.api#xmlName": "item"
    }
  }
},
"com.amazonaws.licensemanager#Filters": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#Filter",
    "traits": {
      "smithy.api#xmlName": "item"
    }
  }
},
"com.amazonaws.licensemanager#GetAccessToken": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#GetAccessTokenRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#GetAccessTokenResponse"
  },
  "errors": [

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```

    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Gets a temporary access token to use with
AssumeRoleWithWebIdentity. Access
tokens\n      are valid for one hour.</p>"
  }
},
"com.amazonaws.licensemanager#GetAccessTokenRequest": {
  "type": "structure",
  "members": {
    "Token": {
      "target": "com.amazonaws.licensemanager#TokenString",
      "traits": {
        "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>",
        "smithy.api#required": {}
      }
    },
    "TokenProperties": {
      "target": "com.amazonaws.licensemanager#MaxSize3StringList",
      "traits": {
        "smithy.api#documentation": "<p>Token properties to validate against those present in the JWT
token.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#GetAccessTokenResponse":
{
  "type": "structure",
  "members": {

```

```

"AccessToken": {
  "target": "com.amazonaws.licensemanager#TokenString",
  "traits": {
    "smithy.api#documentation": "<p>Temporary access token.</p>"
  }
},
"traits": {
  "smithy.api#output": {}
},
"com.amazonaws.licensemanager#GetGrant": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#GetGrantRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#GetGrantResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Gets detailed information about the specified grant.</p>"
  }
},
"com.amazonaws.licensemanager#GetGrantRequest": {

```

```

"type": "structure",
"members": {
  "GrantArn": {
    "target": "com.amazonaws.licensemanager#Arn",
    "traits": {
      "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
      "smithy.api#required": {}
    }
  },
  "Version": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Grant version.</p>"
    }
  }
},
"traits": {
  "smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetGrantResponse": {
  "type": "structure",
  "members": {
    "Grant": {
      "target": "com.amazonaws.licensemanager#Grant",
      "traits": {
        "smithy.api#documentation": "<p>Grant details.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#GetLicense": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#GetLicenseRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#GetLicenseResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {

```



```

        "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
    }
},
{
    "target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
    "smithy.api#documentation": "<p>Gets detailed information about the specified license.</p>"
}
},
"com.amazonaws.licensemanager#GetLicenseConfiguration": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#GetLicenseConfigurationRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetLicenseConfigurationResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Gets detailed information about the specified license configuration.</p>"
    }
}

```

```

    }
  },
  "com.amazonaws.licensemanager#GetLicenseConfigurationRequest": {
    "type": "structure",
    "members": {
      "LicenseConfigurationArn": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
          "smithy.api#required": {}
        }
      },
    },
    "traits": {
      "smithy.api#input": {}
    }
  },
  "com.amazonaws.licensemanager#GetLicenseConfigurationResponse": {
    "type": "structure",
    "members": {
      "LicenseConfigurationId": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Unique ID for the license configuration.</p>"
        }
      },
      "LicenseConfigurationArn": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
        }
      },
      "Name": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Name of the license configuration.</p>"
        }
      },
      "Description": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Description of the license configuration.</p>"
        }
      },
      "LicenseCountingType": {
        "target": "com.amazonaws.licensemanager#LicenseCountingType",

```

```

    "traits": {
      "smithy.api#documentation": "<p>Dimension for which the licenses are counted.</p>"
    }
  },
  "LicenseRules": {
    "target": "com.amazonaws.licensemanager#StringList",
    "traits": {
      "smithy.api#documentation": "<p>License rules.</p>"
    }
  },
  "LicenseCount": {
    "target": "com.amazonaws.licensemanager#BoxLong",

    "traits": {
      "smithy.api#documentation": "<p>Number of available licenses.</p>"
    }
  },
  "LicenseCountHardLimit": {
    "target": "com.amazonaws.licensemanager#BoxBoolean",
    "traits": {
      "smithy.api#documentation": "<p>Sets the number of available licenses as a hard limit.</p>"
    }
  },
  "ConsumedLicenses": {
    "target": "com.amazonaws.licensemanager#BoxLong",
    "traits": {
      "smithy.api#documentation": "<p>Number of licenses assigned to resources.</p>"
    }
  },
  "Status": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>License configuration status.</p>"
    }
  }
},
"OwnerAccountId": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Account ID of the owner of the license configuration.</p>"
  }
},
"ConsumedLicenseSummaryList": {
  "target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
  "traits": {
    "smithy.api#documentation": "<p>Summaries of the licenses consumed by resources.</p>"
  }
},

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"ManagedResourceSummaryList": {
  "target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
  "traits": {
    "smithy.api#documentation": "<p>Summaries of the managed resources.</p>"
  }
},
"Tags": {
  "target": "com.amazonaws.licensemanager#TagList",
  "traits": {
    "smithy.api#documentation": "<p>Tags for the license configuration.</p>"
  }
},
"ProductInformationList": {
  "target": "com.amazonaws.licensemanager#ProductInformationList",
  "traits": {
    "smithy.api#documentation": "<p>Product information.</p>"
  }
},
"AutomatedDiscoveryInformation": {
  "target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
  "traits": {
    "smithy.api#documentation": "<p>Automated discovery information.</p>"
  }
},
"DisassociateWhenNotFound": {
  "target": "com.amazonaws.licensemanager#BoxBoolean",
  "traits": {
    "smithy.api#documentation": "<p>When
true, disassociates a resource when software is uninstalled.</p>"
  }
},
"traits": {
  "smithy.api#output": {}
},
"com.amazonaws.licensemanager#GetLicenseConversionTask": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#GetLicenseConversionTaskRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    }
  ],

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    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Gets information about the specified license type conversion task.</p>"
  }
},
"com.amazonaws.licensemanager#GetLicenseConversionTaskRequest": {
  "type": "structure",
  "members": {
    "LicenseConversionTaskId": {
      "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
      "traits": {
        "smithy.api#documentation": "<p>ID of the license type conversion task to retrieve information on.</p>",
        "smithy.api#required": {}
      }
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#GetLicenseConversionTaskResponse": {
  "type": "structure",
  "members": {
    "LicenseConversionTaskId": {
      "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
      "traits": {
        "smithy.api#documentation": "<p>ID of the license type conversion task.</p>"
      }
    },
    "ResourceArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the resources the license conversion task is associated with.</p>"
      }
    }
  }
}

```

```

    }
  },
  "SourceLicenseContext": {
    "target": "com.amazonaws.licensemanager#LicenseConversionContext",
    "traits": {
      "smithy.api#documentation": "<p>Information
about the license type converted from.</p>"
    }
  },
  "DestinationLicenseContext": {
    "target": "com.amazonaws.licensemanager#LicenseConversionContext",
    "traits": {
      "smithy.api#documentation": "<p>Information about the license type converted to.</p>"
    }
  },
  "StatusMessage": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>The status message for the conversion task.</p>"
    }
  },
  "Status": {
    "target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
    "traits": {
      "smithy.api#documentation": "<p>Status of the license type conversion task.</p>"
    }
  },
  "StartTime": {
    "target": "com.amazonaws.licensemanager#DateTime",
    "traits": {
      "smithy.api#documentation": "<p>Time at which the license type conversion task was started .</p>"
    }
  },
  "LicenseConversionTime": {
    "target": "com.amazonaws.licensemanager#DateTime",
    "traits": {
      "smithy.api#documentation": "<p>Amount of time to complete the license type conversion.</p>"
    }
  },
  "EndTime": {
    "target": "com.amazonaws.licensemanager#DateTime",
    "traits": {
      "smithy.api#documentation": "<p>Time at which the license type conversion task was
completed.</p>"
    }
  },
}

```

```

    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#GetLicenseManagerReportGenerator":
{
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Gets information about the specified report generator.</p>"
  }
},
  "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest": {
    "type": "structure",
    "members": {
      "LicenseManagerReportGeneratorArn": {

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```

        "target": "com.amazonaws.licensemanager#String",
        "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator.</p>",
            "smithy.api#required":
        }
    }
},
"traits": {
    "smithy.api#input": {}
},
"com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse": {
    "type": "structure",
    "members": {
        "ReportGenerator": {
            "target": "com.amazonaws.licensemanager#ReportGenerator",
            "traits": {
                "smithy.api#documentation": "<p>A report generator that creates periodic reports about your license configurations.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    },
},
"com.amazonaws.licensemanager#GetLicenseRequest": {
    "type": "structure",
    "members": {
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "Version": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
            "smithy.api#documentation": "<p>License version.</p>"
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
}

```



```

    },
    "com.amazonaws.licensemanager#GetLicenseResponse": {
      "type": "structure",
      "members": {
        "License": {
          "target": "com.amazonaws.licensemanager#License",
          "traits": {
            "smithy.api#documentation": "<p>License details.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#GetLicenseUsage": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#GetLicenseUsageRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#GetLicenseUsageResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
      ],
      "target": "com.amazonaws.licensemanager#ValidationException"
    },
    "traits": {
      "smithy.api#documentation": "<p>Gets detailed information about the usage of the specified license.</p>"
    }
  }
}

```

```

    },
    "com.amazonaws.licensemanager#GetLicenseUsageRequest": {
      "type": "structure",
      "members": {
        "LicenseArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#GetLicenseUsageResponse": {
      "type": "structure",
      "members": {
        "LicenseUsage": {
          "target":
"com.amazonaws.licensemanager#LicenseUsage",
          "traits": {
            "smithy.api#documentation": "<p>License usage details.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#GetServiceSettings": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#GetServiceSettingsRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#GetServiceSettingsResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        }
      ]
    }
  }

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```

    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Gets the License Manager settings for the current Region.</p>"
  }
},
"com.amazonaws.licensemanager#GetServiceSettingsRequest": {
  "type": "structure",
  "members": {},
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#GetServiceSettingsResponse": {
  "type": "structure",
  "members": {
    "S3BucketArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Regional S3 bucket path for storing reports, license trail event data,
discovery data,\n      and so on.</p>"
      }
    }
  },
  "SnsTopicArn": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>SNS topic configured to receive notifications from License
Manager.</p>"
    }
  },
  "OrganizationConfiguration": {
    "target": "com.amazonaws.licensemanager#OrganizationConfiguration",
    "traits": {
      "smithy.api#documentation": "<p>Indicates whether Organizations is integrated with License
Manager for\n      cross-account discovery.</p>"
    }
  },
  "EnableCrossAccountsDiscovery": {
    "target": "com.amazonaws.licensemanager#BoxBoolean",
    "traits": {
      "smithy.api#documentation": "<p>Indicates whether cross-account discovery is enabled.</p>"
    }
  }
}

```

```

    },
    "LicenseManagerResourceShareArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource share. The License
Manager management account \n      provides member accounts with access to this share.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#Grant": {
  "type": "structure",
  "members": {
    "GrantArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
        "smithy.api#required": {}
      }
    },
    "GrantName": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Grant name.</p>",
        "smithy.api#required": {}
      }
    },
    "ParentArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>Parent ARN.</p>",
        "smithy.api#required": {}
      }
    },
    "LicenseArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>License ARN.</p>",
        "smithy.api#required": {}
      }
    },
    "GranteePrincipalArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {

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"smithy.api#documentation": "<p>The grantee principal ARN.</p>",
  "smithy.api#required": {}
},
"HomeRegion": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Home Region of the grant.</p>",
    "smithy.api#required": {}
  }
},
"GrantStatus": {
  "target": "com.amazonaws.licensemanager#GrantStatus",
  "traits": {
    "smithy.api#documentation": "<p>Grant status.</p>",
    "smithy.api#required": {}
  }
},
"StatusReason": {
  "target": "com.amazonaws.licensemanager#StatusReasonMessage",
  "traits": {
    "smithy.api#documentation": "<p>Grant status reason.</p>"
  }
},
"Version": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Grant version.</p>",
    "smithy.api#required": {}
  }
},
"GrantedOperations": {
  "target": "com.amazonaws.licensemanager#AllowedOperationList",
  "traits": {
    "smithy.api#documentation": "<p>Granted operations.</p>",
    "smithy.api#required": {}
  }
},
"Options": {
  "target": "com.amazonaws.licensemanager#Options",
  "traits": {
    "smithy.api#documentation": "<p>The options specified for the grant.</p>"
  }
},
"traits": {
  "smithy.api#documentation":

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"<p>Describes a grant.</p>"
  }
},
"com.amazonaws.licensemanager#GrantList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#Grant"
  }
},
"com.amazonaws.licensemanager#GrantStatus": {
  "type": "enum",
  "members": {
    "PENDING_WORKFLOW": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "PENDING_WORKFLOW"
      }
    },
    "PENDING_ACCEPT": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "PENDING_ACCEPT"
      }
    },
    "REJECTED": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "REJECTED"
      }
    }
  }
},
"ACTIVE": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "ACTIVE"
  }
},
"FAILED_WORKFLOW": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "FAILED_WORKFLOW"
  }
},
"DELETED": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "DELETED"
  }
}

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```

    },
    "PENDING_DELETE": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "PENDING_DELETE"
      }
    },
    "DISABLED": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "DISABLED"
      }
    },
    "WORKFLOW_COMPLETED": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "WORKFLOW_COMPLETED"
      }
    }
  }
},
"com.amazonaws.licensemanager#GrantedLicense": {
  "type": "structure",
  "members": {
    "LicenseArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
      }
    },
    "LicenseName": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>License name.</p>"
      }
    }
  }
},
"ProductName": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Product name.</p>"
  }
},
"ProductSKU": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Product SKU.</p>"
  }
}

```

```

    }
  },
  "Issuer": {
    "target": "com.amazonaws.licensemanager#IssuerDetails",
    "traits": {
      "smithy.api#documentation": "<p>Granted license issuer.</p>"
    }
  },
  "HomeRegion": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Home Region of the granted license.</p>"
    }
  },
  "Status": {
    "target": "com.amazonaws.licensemanager#LicenseStatus",
    "traits": {
      "smithy.api#documentation": "<p>Granted license status.</p>"
    }
  },
  "Validity": {
    "target": "com.amazonaws.licensemanager#DatetimeRange",
    "traits": {
      "smithy.api#documentation": "<p>Date and time range during which the granted license is valid, in ISO8601-UTC format.</p>"
    }
  },
  "Beneficiary": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Granted license beneficiary.</p>"
    }
  },
  "Entitlements": {
    "target": "com.amazonaws.licensemanager#EntitlementList",
    "traits": {
      "smithy.api#documentation": "<p>License entitlements.</p>"
    }
  },
  "ConsumptionConfiguration": {
    "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
    "traits": {
      "smithy.api#documentation": "<p>Configuration for consumption of the license.</p>"
    }
  },
  "LicenseMetadata": {
    "target": "com.amazonaws.licensemanager#MetadataList",

```



```

    "traits": {
      "smithy.api#documentation": "<p>Granted license metadata.</p>"
    }
  },
  "CreateTime": {
    "target": "com.amazonaws.licensemanager#ISO8601DateTime",
    "traits": {
      "smithy.api#documentation": "<p>Creation time of the granted license.</p>"
    }
  }
},
"Version": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Version of the granted license.</p>"
  }
},
"ReceivedMetadata": {
  "target": "com.amazonaws.licensemanager#ReceivedMetadata",
  "traits": {
    "smithy.api#documentation": "<p>Granted license received metadata.</p>"
  }
},
"traits": {
  "smithy.api#documentation": "<p>Describes a license that is granted to a grantee.</p>"
},
"com.amazonaws.licensemanager#GrantedLicenseList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#GrantedLicense"
  }
},
"com.amazonaws.licensemanager#ISO8601DateTime":
{
  "type": "string",
  "traits": {
    "smithy.api#length": {
      "min": 0,
      "max": 50
    },
    "smithy.api#pattern": "^(-(?:[1-9][0-9]*)?[0-9]{4})-(1[0-2]|0[1-9])-(3[0-1]|0[1-9]|1-2)[0-9]T(2[0-3]|[0-1][0-9]):([0-5][0-9]):([0-5][0-9])(\\.([0-9]+)?(?:Z|[+-](?:2[ 0-3]|[0-1][0-9]):[0-5][0-9])+$)"
  }
},
"com.amazonaws.licensemanager#Integer": {
  "type": "integer"
}

```

```

    },
    "com.amazonaws.licensemanager#InvalidParameterValueException": {
      "type": "structure",
      "members": {
        "Message": {
          "target": "com.amazonaws.licensemanager#Message"
        }
      },
      "traits": {
        "aws.protocols#awsQueryError": {
          "code": "InvalidParameterValueProvided",
          "httpResponseCode": 400
        },
        "smithy.api#documentation":
        "<p>One or more parameter values are not valid.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
      }
    },
    "com.amazonaws.licensemanager#InvalidResourceStateException": {
      "type": "structure",
      "members": {
        "Message": {
          "target": "com.amazonaws.licensemanager#Message"
        }
      },
      "traits": {
        "aws.protocols#awsQueryError": {
          "code": "InvalidResourceState",
          "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>License Manager cannot allocate a license to a resource because of its
state. </p>\n    <p>For example, you cannot allocate a license to an instance in the process of shutting\n
down.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
      }
    },
    "com.amazonaws.licensemanager#InventoryFilter": {
      "type": "structure",
      "members": {
        "Name": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Name of the filter.</p>",
            "smithy.api#required": {}
          }
        }
      }
    }

```

```

    },
    "Condition": {
      "target": "com.amazonaws.licensemanager#InventoryFilterCondition",
      "traits": {
        "smithy.api#documentation": "<p>Condition of the filter.</p>",
        "smithy.api#required": {}
      }
    },
    "Value": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Value of the filter.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>An inventory filter.</p>"
  }
},
"com.amazonaws.licensemanager#InventoryFilterCondition": {
  "type": "enum",
  "members": {
    "EQUALS": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "EQUALS"
      }
    },
    "NOT_EQUALS": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "NOT_EQUALS"
      }
    },
    "BEGINS_WITH": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "BEGINS_WITH"
      }
    },
    "CONTAINS": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "CONTAINS"
      }
    }
  }
}

```

```

    },
    "com.amazonaws.licensemanager#InventoryFilterList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#InventoryFilter"
      }
    },
    "com.amazonaws.licensemanager#Issuer": {
      "type": "structure",
      "members": {
        "Name": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Issuer name.</p>",
            "smithy.api#required": {}
          }
        },
        "SignKey": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Asymmetric KMS key from Key Management Service. The KMS
key must have a key usage
of sign and verify, \n      and support the RSASSA-PSS SHA-256 signing algorithm.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Details about the issuer of a license.</p>"
      }
    },
    "com.amazonaws.licensemanager#IssuerDetails": {
      "type": "structure",
      "members": {
        "Name": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Issuer name.</p>"
          }
        },
        "SignKey": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Asymmetric KMS key from Key Management Service. The KMS
key must have a key usage of sign and verify, \n      and support the RSASSA-PSS SHA-256 signing
algorithm.</p>"
          }
        },
        "KeyFingerprint": {

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    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Issuer key fingerprint.</p>"
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Details associated with the issuer of a license.</p>"
  }
},
"com.amazonaws.licensemanager#License": {
  "type": "structure",
  "members": {
    "LicenseArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
      }
    },
    "LicenseName": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>License name.</p>"
      }
    },
    "ProductName": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Product name.</p>"
      }
    },
    "ProductSKU": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Product SKU.</p>"
      }
    },
    "Issuer": {
      "target": "com.amazonaws.licensemanager#IssuerDetails",
      "traits": {
        "smithy.api#documentation": "<p>License issuer.</p>"
      }
    },
    "HomeRegion": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {

```

```

"smithy.api#documentation": "<p>Home Region of the license.</p>"
  }
},
"Status": {
  "target": "com.amazonaws.licensemanager#LicenseStatus",
  "traits": {
    "smithy.api#documentation": "<p>License status.</p>"
  }
},
"Validity": {
  "target": "com.amazonaws.licensemanager#DatetimeRange",
  "traits": {
    "smithy.api#documentation": "<p>Date and time range during which the license is valid, in ISO8601-
UTC format.</p>"
  }
},
"Beneficiary": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>License beneficiary.</p>"
  }
},
"Entitlements": {
  "target": "com.amazonaws.licensemanager#EntitlementList",
  "traits": {
    "smithy.api#documentation": "<p>License entitlements.</p>"
  }
},
"ConsumptionConfiguration": {
  "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
  "traits": {
    "smithy.api#documentation": "<p>Configuration for consumption of the license.</p>"
  }
},
"LicenseMetadata": {
  "target": "com.amazonaws.licensemanager#MetadataList",
  "traits": {
    "smithy.api#documentation": "<p>License metadata.</p>"
  }
},
"CreateTime": {
  "target": "com.amazonaws.licensemanager#ISO8601DateTime",
  "traits": {
    "smithy.api#documentation": "<p>License
creation time.</p>"
  }
},

```

```

"Version": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>License version.</p>"
  }
},
"traits": {
  "smithy.api#documentation": "<p>Software license that is managed in License Manager.</p>"
},
"com.amazonaws.licensemanager#LicenseConfiguration": {
  "type": "structure",
  "members": {
    "LicenseConfigurationId": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Unique ID of the license configuration.</p>"
      }
    },
    "LicenseConfigurationArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
      }
    },
    "Name": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Name of the license configuration.</p>"
      }
    },
    "Description": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Description of the license configuration.</p>"
      }
    },
    "LicenseCountingType": {
      "target": "com.amazonaws.licensemanager#LicenseCountingType",
      "traits": {
        "smithy.api#documentation": "<p>Dimension to use to track the license inventory.</p>"
      }
    },
    "LicenseRules": {
      "target": "com.amazonaws.licensemanager#StringList",
      "traits": {
        "smithy.api#documentation": "<p>License rules.</p>"
      }
    }
  }
}

```

```

    }
  },
  "LicenseCount": {
    "target": "com.amazonaws.licensemanager#BoxLong",
    "traits": {
      "smithy.api#documentation": "<p>Number of licenses managed by the license configuration.</p>"
    }
  },
  "LicenseCountHardLimit": {
    "target": "com.amazonaws.licensemanager#BoxBoolean",
    "traits": {
      "smithy.api#documentation": "<p>Number of available licenses as a hard limit.</p>"
    }
  },
  "DisassociateWhenNotFound": {
    "target": "com.amazonaws.licensemanager#BoxBoolean",
    "traits": {
      "smithy.api#documentation": "<p>When true, disassociates a resource when software is
uninstalled.</p>"
    }
  },
  "ConsumedLicenses": {
    "target": "com.amazonaws.licensemanager#BoxLong",
    "traits": {
      "smithy.api#documentation": "<p>Number of licenses consumed. </p>"
    }
  },
  "Status": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Status of the license configuration.</p>"
    }
  },
  "OwnerAccountId": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Account ID of the license configuration's owner.</p>"
    }
  },
  "ConsumedLicenseSummaryList": {
    "target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
    "traits": {
      "smithy.api#documentation": "<p>Summaries for licenses consumed by various resources.</p>"
    }
  },
  "ManagedResourceSummaryList": {
    "target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",

```



```

    "traits": {
      "smithy.api#documentation": "<p>Summaries for managed resources.</p>"
    }
  },
  "ProductInformationList": {
    "target": "com.amazonaws.licensemanager#ProductInformationList",
    "traits": {
      "smithy.api#documentation": "<p>Product information.</p>"
    }
  },
  "AutomatedDiscoveryInformation": {
    "target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
    "traits": {
      "smithy.api#documentation": "<p>Automated discovery information.</p>"
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>A license configuration is an abstraction of a customer license agreement that can be\n    consumed and enforced by License Manager. Components include specifications for the license\n    type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n    Dedicated Instance, Dedicated Host, or all of these), host affinity (how long a VM\n    must be associated with a host), and the number of licenses purchased and used.</p>"
  },
  "com.amazonaws.licensemanager#LicenseConfigurationAssociation": {
    "type": "structure",
    "members": {
      "ResourceArn": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
        }
      },
      "ResourceType": {
        "target": "com.amazonaws.licensemanager#ResourceType",
        "traits": {
          "smithy.api#documentation": "<p>Type of server resource.</p>"
        }
      },
      "ResourceOwnerId": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>ID of the Amazon Web Services account that owns the resource consuming licenses.</p>"
        }
      }
    }
  }
}

```

```

    },
    "AssociationTime": {
      "target": "com.amazonaws.licensemanager#DateTime",
      "traits": {
        "smithy.api#documentation": "<p>Time when the license configuration was associated with the resource.</p>"
      }
    },
    "AmiAssociationScope": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Scope of AMI associations. The possible value is <code>cross-account</code>.</p>"
      }
    },
    "traits": {
      "smithy.api#documentation": "<p>Describes an association with a license configuration.</p>"
    },
    "com.amazonaws.licensemanager#LicenseConfigurationAssociations": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#LicenseConfigurationAssociation"
      }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationStatus": {
      "type": "enum",
      "members": {
        "AVAILABLE": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "AVAILABLE"
          }
        },
        "DISABLED": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "DISABLED"
          }
        }
      }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationUsage": {
      "type": "structure",
      "members": {
        "ResourceArn": {

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```

    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
    }
  },
  "ResourceType": {
    "target": "com.amazonaws.licensemanager#ResourceType",
    "traits": {
      "smithy.api#documentation": "<p>Type of resource.</p>"
    }
  },
  "ResourceStatus": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Status of the resource.</p>"
    }
  },
  "ResourceOwnerId": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>ID of the account that owns the resource.</p>"
    }
  },
  "AssociationTime": {
    "target": "com.amazonaws.licensemanager#DateTime",
    "traits": {
      "smithy.api#documentation": "<p>Time when the license configuration was initially associated with
the resource.</p>"
    }
  },

  "ConsumedLicenses": {
    "target": "com.amazonaws.licensemanager#BoxLong",
    "traits": {
      "smithy.api#documentation": "<p>Number of licenses consumed by the resource.</p>"
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Details about the usage of a resource associated with a license
configuration.</p>"
  },
  "com.amazonaws.licensemanager#LicenseConfigurationUsageList": {
    "type": "list",
    "member": {
      "target": "com.amazonaws.licensemanager#LicenseConfigurationUsage"
    }
  }
}

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```

    }
  },
  "com.amazonaws.licensemanager#LicenseConfigurations": {
    "type": "list",
    "member": {
      "target": "com.amazonaws.licensemanager#LicenseConfiguration"
    }
  },
  "com.amazonaws.licensemanager#LicenseConversionContext": {
    "type": "structure",
    "members": {
      "UsageOperation": {
        "target": "com.amazonaws.licensemanager#UsageOperation",
        "traits": {
          "smithy.api#documentation": "<p>The Usage operation value that corresponds to the license type you
are converting your resource from. For more information about which platforms correspond to which usage
operation values see <a href=\"https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/billing-info-
fields.html#billing-info\">Sample data: usage operation by platform\n  </a>\n  </p>"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Information about a license type conversion task.</p>"
      }
    },
    "com.amazonaws.licensemanager#LicenseConversionTask": {
      "type": "structure",
      "members": {
        "LicenseConversionTaskId": {
          "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
          "traits": {
            "smithy.api#documentation": "<p>The ID of the license type conversion task.</p>"
          }
        },
        "ResourceArn": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource associated
with the license type\n  conversion task.</p>"
          }
        },
        "SourceLicenseContext": {
          "target": "com.amazonaws.licensemanager#LicenseConversionContext",
          "traits": {
            "smithy.api#documentation": "<p>Information about the license type this conversion task converted
from.</p>"
          }
        }
      }
    }
  }
}

```

```

    }
  },
  "DestinationLicenseContext": {
    "target":
"com.amazonaws.licensemanager#LicenseConversionContext",
    "traits": {
      "smithy.api#documentation": "<p>Information about the license type this conversion task converted
to.</p>"
    }
  },
  "Status": {
    "target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
    "traits": {
      "smithy.api#documentation": "<p>The status of the conversion task.</p>"
    }
  },
  "StatusMessage": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>The status message for the conversion task.</p>"
    }
  },
  "StartTime": {
    "target": "com.amazonaws.licensemanager#DateTime",
    "traits": {
      "smithy.api#documentation":
"<p>The time the conversion task was started at.</p>"
    }
  },
  "LicenseConversionTime": {
    "target": "com.amazonaws.licensemanager#DateTime",
    "traits": {
      "smithy.api#documentation": "<p>The time the usage operation value of the resource was
changed.</p>"
    }
  },
  "EndTime": {
    "target": "com.amazonaws.licensemanager#DateTime",
    "traits": {
      "smithy.api#documentation": "<p>The time the conversion task was completed.</p>"
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Information about a license type conversion task.</p>"
  }
},
"com.amazonaws.licensemanager#LicenseConversionTaskId": {

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```

    "type": "string",
    "traits": {

    "smithy.api#length": {
        "min": 0,
        "max": 50
    },
    "smithy.api#pattern": "^lct-[a-zA-Z0-9]*$"
    }
},
"com.amazonaws.licensemanager#LicenseConversionTaskStatus": {
    "type": "enum",
    "members": {
        "IN_PROGRESS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "IN_PROGRESS"
            }
        },
        "SUCCEEDED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "SUCCEEDED"
            }
        },
        "FAILED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "FAILED"
            }
        }
    }
},
"com.amazonaws.licensemanager#LicenseConversionTasks":
{
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#LicenseConversionTask"
    }
},
"com.amazonaws.licensemanager#LicenseCountingType": {
    "type": "enum",
    "members": {
        "VCPU": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "vCPU"
            }
        }
    }
}

```

```

    },
    "INSTANCE": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Instance"
      }
    },
    "CORE": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Core"
      }
    },
    "SOCKET": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Socket"
      }
    }
  }
},
"com.amazonaws.licensemanager#LicenseDeletionStatus": {
  "type": "enum",
  "members": {
    "PENDING_DELETE": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "PENDING_DELETE"
      }
    },
    "DELETED": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "DELETED"
      }
    }
  }
},
"com.amazonaws.licensemanager#LicenseList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#License"
  }
},
"com.amazonaws.licensemanager#LicenseOperationFailure": {
  "type": "structure",
  "members": {

```

```

"ResourceArn": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
  }
},
"ResourceType": {
  "target": "com.amazonaws.licensemanager#ResourceType",
  "traits": {
    "smithy.api#documentation": "<p>Resource type.</p>"
  }
},
"ErrorMessage": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Error message.</p>"
  }
},
"FailureTime": {
  "target": "com.amazonaws.licensemanager#DateTime",
  "traits": {
    "smithy.api#documentation": "<p>Failure time.</p>"
  }
},
"OperationName": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Name of the operation.</p>"
  }
},
"ResourceOwnerId": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>ID of the Amazon Web Services account that owns the
resource.</p>"
  }
},
"OperationRequestedBy": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>The requester is \"License Manager Automated Discovery\".</p>"
  }
},
"MetadataList": {
  "target": "com.amazonaws.licensemanager#MetadataList",
  "traits": {

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        "smithy.api#documentation": "<p>Reserved.</p>"
    }
}
},
"traits": {
    "smithy.api#documentation": "<p>Describes the failure of a license operation.</p>"
}
},
"com.amazonaws.licensemanager#LicenseOperationFailureList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#LicenseOperationFailure"
    }
},
"com.amazonaws.licensemanager#LicenseSpecification": {
    "type": "structure",
    "members": {
        "LicenseConfigurationArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                "smithy.api#required": {}
            }
        },
        "AmiAssociationScope": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Scope of AMI associations. The possible value is <code>cross-
account</code>.</p>"
            }
        }
    }
},
"traits": {
    "smithy.api#documentation": "<p>Details for associating a license configuration with a resource.</p>"
}
},
"com.amazonaws.licensemanager#LicenseSpecifications": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#LicenseSpecification"
    }
},
"com.amazonaws.licensemanager#LicenseStatus": {
    "type": "enum",
    "members": {
        "AVAILABLE": {

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    "target": "smithy.api#Unit",

    "traits": {
      "smithy.api#enumValue": "AVAILABLE"
    }
  },
  "PENDING_AVAILABLE": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "PENDING_AVAILABLE"
    }
  },
  "DEACTIVATED": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "DEACTIVATED"
    }
  },
  "SUSPENDED": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "SUSPENDED"
    }
  },
  "EXPIRED": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "EXPIRED"
    }
  },

  "PENDING_DELETE": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "PENDING_DELETE"
    }
  },
  "DELETED": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "DELETED"
    }
  }
},
"com.amazonaws.licensemanager#LicenseUsage": {
  "type": "structure",
  "members": {

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    "EntitlementUsages": {
      "target": "com.amazonaws.licensemanager#EntitlementUsageList",
      "traits": {
        "smithy.api#documentation": "<p>License entitlement usages.</p>"
      }
    },
    "traits": {
      "smithy.api#documentation": "<p>Describes the entitlement usage associated with a license.</p>"
    }
  },
  "com.amazonaws.licensemanager#LicenseUsageException": {
    "type": "structure",
    "members": {
      "Message": {
        "target": "com.amazonaws.licensemanager#Message"
      }
    },
    "traits": {
      "aws.protocols#awsQueryError": {
        "code": "LicenseUsageFailure",
        "httpResponseCode": 412
      },
      "smithy.api#documentation": "<p>You do not have enough licenses available to support a new resource launch.</p>",
      "smithy.api#error": "client",
      "smithy.api#httpError": 412
    }
  },
  "com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
      }
    ]
  }
}

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    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Lists the resource associations for the
specified license configuration.</p>\n    <p>Resource associations need not consume licenses from a license
configuration. \n    For example, an AMI or a stopped instance might not consume a license (depending on \n
the license rules).</p>"
  }
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest": {
  "type": "structure",
  "members": {
    "LicenseConfigurationArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of a license configuration.</p>",
        "smithy.api#required": {}
      }
    },
    "MaxResults": {
      "target": "com.amazonaws.licensemanager#BoxInteger",
      "traits": {
        "smithy.api#documentation": "<p>Maximum number of results
to return in a single call.</p>"
      }
    },
    "NextToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse": {
  "type": "structure",

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"members": {
  "LicenseConfigurationAssociations": {
    "target": "com.amazonaws.licensemanager#LicenseConfigurationAssociations",
    "traits": {
      "smithy.api#documentation": "<p>Information about the associations for the license
configuration.</p>"
    }
  },
  "NextToken": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Token for the next set of results.</p>"
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#ListDistributedGrants": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#ListDistributedGrantsRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#ListDistributedGrantsResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {

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        "target": "com.amazonaws.licensemanager#ValidationException"
    }
],
"traits": {
    "smithy.api#documentation": "<p>Lists the grants distributed for the specified license.</p>"
}
},
"com.amazonaws.licensemanager#ListDistributedGrantsRequest": {
    "type": "structure",
    "members": {
        "GrantArns": {
            "target": "com.amazonaws.licensemanager#ArnList",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the grants.</p>"
            }
        },
        "Filters": {
            "target": "com.amazonaws.licensemanager#FilterList",
            "traits": {
                "smithy.api#documentation": "<p>Filters to scope the results. The following filters are supported:</p>\n
                <ul>\n
                <li>\n
                <p>\n
                <code>LicenseArn</code>\n
                </p>\n
                </li>\n
                <li>\n
                <p>\n
                <code>GrantStatus</code>\n
                </p>\n
                </li>\n
                <li>\n
                <p>\n
                <code>GranteePrincipalARN</code>\n
                </p>\n
                </li>\n
                <li>\n
                <p>\n
                <code>ProductSKU</code>\n
                </p>\n
                </li>\n
                <li>\n
                <p>\n
                <code>LicenseIssuerName</code>\n
                </p>\n
                </li>\n
                </ul>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        },
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#ListDistributedGrantsResponse": {
    "type": "structure",

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"members": {
  "Grants": {
    "target": "com.amazonaws.licensemanager#GrantList",

"traits": {
  "smithy.api#documentation": "<p>Distributed grant details.</p>"
  },
  "NextToken": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Token for the next set of results.</p>"
    }
  },
  "traits": {
    "smithy.api#output": {}
  },
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse"
  },
  "errors": [
    {
"target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Lists the license configuration operations that failed.</p>"
  }
}

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```

    },
    "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest": {
      "type": "structure",
      "members": {
        "LicenseConfigurationArn": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name of the license configuration.</p>",
            "smithy.api#required": {}
          }
        },
        "MaxResults": {
          "target": "com.amazonaws.licensemanager#BoxInteger",
          "traits": {
            "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse":
  {
    "type": "structure",
    "members": {
      "LicenseOperationFailureList": {
        "target": "com.amazonaws.licensemanager#LicenseOperationFailureList",
        "traits": {
          "smithy.api#documentation": "<p>License configuration operations that failed.</p>"
        }
      },
      "NextToken": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Token for the next set of results.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  }

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    },
    "com.amazonaws.licensemanager#ListLicenseConfigurations": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Lists the license configurations for your account.</p>"
      }
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest": {
      "type": "structure",
      "members": {
        "LicenseConfigurationArns": {
          "target": "com.amazonaws.licensemanager#StringList",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the license configurations.</p>"
          }
        },
        "MaxResults": {
          "target": "com.amazonaws.licensemanager#BoxInteger",
          "traits": {

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    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
  }
},
"NextToken": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Token for the next
set of results.</p>"
  }
},
"Filters": {
  "target": "com.amazonaws.licensemanager#Filters",
  "traits": {
    "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
operators\n are supported:</p>\n <ul>\n <li>\n <p>\n
<code>licenseCountingType</code> - The dimension for which licenses are counted.\n Possible values are
<code>vCPU</code> | <code>Instance</code> | <code>Core</code> | <code>Socket</code>.\n Logical
operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n </li>\n <li>\n
<p>\n <code>enforceLicenseCount</code> - A Boolean value that indicates whether hard license
enforcement is used. \n Logical operators are <code>EQUALS</code> |
<code>NOT_EQUALS</code>.</p>\n
</li>\n <li>\n <p>\n <code>usagelimitExceeded</code> - A Boolean value that
indicates whether the available licenses have been exceeded. \n Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n </li>\n </ul>"
  }
},
"traits": {
  "smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicenseConfigurationsResponse": {
  "type": "structure",
  "members": {
    "LicenseConfigurations": {
      "target": "com.amazonaws.licensemanager#LicenseConfigurations",
      "traits": {
        "smithy.api#documentation": "<p>Information about the license configurations.</p>"
      }
    },
    "NextToken": {
      "target": "com.amazonaws.licensemanager#String",

      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    }
  }
},

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    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#ListLicenseConversionTasks": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
      }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Lists the license type conversion tasks for your account.</p>"
    }
  },
  "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest": {
    "type": "structure",
    "members": {
      "NextToken": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Token for the next set of results.</p>"
        }
      },
      "MaxResults": {
        "target": "com.amazonaws.licensemanager#BoxInteger",
        "traits": {
          "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
        }
      }
    }
  }

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    },
    "Filters": {
      "target": "com.amazonaws.licensemanager#Filters",
      "traits": {
        "smithy.api#documentation": "<p>\n    Filters to scope the results. Valid filters are
<code>ResourceArns</code> and <code>Status</code>.\n    </p>"
      }
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#ListLicenseConversionTasksResponse": {
  "type": "structure",
  "members": {
    "LicenseConversionTasks": {
      "target": "com.amazonaws.licensemanager#LicenseConversionTasks",
      "traits": {
        "smithy.api#documentation": "<p>Information about the license configuration tasks for your
account.</p>"
      }
    },
    "NextToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#ListLicenseManagerReportGenerators": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target":

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"com.amazonaws.licensemanager#AuthorizationException"
  },
  {
    "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
  },
  {
    "target": "com.amazonaws.licensemanager#RateLimitExceededException"
  },
  {
    "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
  },
  {
    "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
  },
  {
    "target": "com.amazonaws.licensemanager#ServerInternalException"
  },
  {
    "target": "com.amazonaws.licensemanager#ValidationException"
  }
],
"traits": {
  "smithy.api#documentation": "<p>Lists the report generators for your account.</p>"
}
},
"com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest":
{
  "type": "structure",
  "members": {
    "Filters": {
      "target": "com.amazonaws.licensemanager#FilterList",
      "traits": {
        "smithy.api#documentation": "<p>Filters to scope the results. The following filters are supported:
</p>\n  <ul>\n    <li>\n      <p>\n        <code>LicenseConfigurationArn</code>\n      </li>\n    </ul>\n"
      }
    },
    "NextToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    },
    "MaxResults": {
      "target": "com.amazonaws.licensemanager#MaxSize100",
      "traits": {
        "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
      }
    }
  }
}

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    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse": {
  "type": "structure",
  "members": {
    "ReportGenerators": {
      "target": "com.amazonaws.licensemanager#ReportGeneratorList",
      "traits": {
        "smithy.api#documentation": "<p>A report generator that creates periodic reports about your license configurations.</p>"
      }
    },
    "NextToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    }
  }
},
"traits": {
  "smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResource": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {

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        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
    }
],
"traits": {
    "smithy.api#documentation": "<p>Describes the license configurations for the specified resource.</p>"
}
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest": {
    "type": "structure",
    "members": {
        "ResourceArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of a resource that has an
associated license configuration.</p>",
                "smithy.api#required": {}
            }
        },
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse": {
    "type": "structure",
    "members": {
        "LicenseSpecifications": {
            "target": "com.amazonaws.licensemanager#LicenseSpecifications",
            "traits": {
                "smithy.api#documentation": "<p>License configurations associated with a resource.</p>"
            }
        }
    },
}

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    "NextToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#ListLicenseVersions": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#ListLicenseVersionsRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#ListLicenseVersionsResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
      }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Lists all versions of the specified license.</p>"
    }
  },
  "com.amazonaws.licensemanager#ListLicenseVersionsRequest": {
    "type": "structure",
    "members": {
      "LicenseArn": {
        "target": "com.amazonaws.licensemanager#Arn",
        "traits": {
          "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
          "smithy.api#required": {}
        }
      }
    }
  }
}

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    }
  },
  "NextToken": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Token for the next set of results.</p>"
    }
  },
  "MaxResults": {
    "target": "com.amazonaws.licensemanager#MaxSize100",
    "traits": {
      "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
    }
  }
},
"traits": {
  "smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicenseVersionsResponse": {
  "type": "structure",
  "members": {
    "Licenses": {
      "target": "com.amazonaws.licensemanager#LicenseList",
      "traits": {
        "smithy.api#documentation": "<p>License details.</p>"
      }
    }
  },
  "NextToken": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Token for the next set of results.</p>"
    }
  }
},
"traits": {
  "smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListLicenses": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#ListLicensesRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#ListLicensesResponse"
  },

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"errors": [
  {
    "target": "com.amazonaws.licensemanager#AccessDeniedException"
  },
  {
    "target": "com.amazonaws.licensemanager#AuthorizationException"
  },
  {
    "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
  },
  {
    "target": "com.amazonaws.licensemanager#RateLimitExceededException"
  },
  {
    "target": "com.amazonaws.licensemanager#ServerInternalException"
  },
  {
    "target": "com.amazonaws.licensemanager#ValidationException"
  }
],
"traits": {
  "smithy.api#documentation": "<p>Lists the licenses for your account.</p>"
}
},
"com.amazonaws.licensemanager#ListLicensesRequest": {
  "type": "structure",
  "members": {
    "LicenseArns": {
      "target": "com.amazonaws.licensemanager#ArnList",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the licenses.</p>"
      }
    }
  },
  "Filters": {
    "target": "com.amazonaws.licensemanager#FilterList",
    "traits": {
      "smithy.api#documentation": "<p>Filters to scope the results. The following filters are supported:</p>\n
      <ul>\n
        <li>\n
          <p>\n
            <code>Beneficiary</code>\n
          </p>\n
        </li>\n
        <li>\n
          <p>\n
            <code>ProductSKU</code>\n
          </p>\n
        </li>\n
        <li>\n
          <p>\n
            <code>Fingerprint</code>\n
          </p>\n
        </li>\n
        <li>\n
          <p>\n
            <code>Status</code>\n
          </p>\n
        </li>\n
      </ul>"
    }
  },
  "NextToken": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Token

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for the next set of results.</p>"

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    }
  },
  "MaxResults": {
    "target": "com.amazonaws.licensemanager#MaxSize100",
    "traits": {
      "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
    }
  }
},
"traits": {
  "smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicensesResponse": {
  "type": "structure",
  "members": {
    "Licenses": {
      "target": "com.amazonaws.licensemanager#LicenseList",
      "traits": {
        "smithy.api#documentation": "<p>License details.</p>"
      }
    },
    "NextToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#ListReceivedGrants": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#ListReceivedGrantsRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#ListReceivedGrantsResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
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    "target": "com.amazonaws.licensemanager#AuthorizationException"
  },
  {
    "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
  },
  {
    "target": "com.amazonaws.licensemanager#RateLimitExceededException"
  },
  {
    "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
  },
  {
    "target": "com.amazonaws.licensemanager#ServerInternalException"
  },
  {
    "target": "com.amazonaws.licensemanager#ValidationException"
  }
],
"traits": {
  "smithy.api#documentation": "<p>Lists grants that are received. Received grants are grants created while specifying the\n    recipient as this Amazon Web Services account, your organization, or an organizational unit\n    (OU) to which this member account belongs.</p>"
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsForOrganization": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
    }
  ],

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    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target":
"com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Lists the grants received for all accounts in the organization.</p>"
  }
},
"com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest": {
  "type": "structure",
  "members": {
    "LicenseArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the received license.</p>",
        "smithy.api#required": {}
      }
    },
    "Filters": {
      "target": "com.amazonaws.licensemanager#FilterList",
      "traits": {
        "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n
      <ul>\n
        <li>\n
          <p>\n
            <code>ParentArn</code>\n
          </p>\n
        </li>\n
        <li>\n
          <p>\n
            <code>GranteePrincipalArn</code>\n
          </p>\n
        </li>\n
      </ul>"
      }
    },
    "NextToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    },
    "MaxResults": {
      "target": "com.amazonaws.licensemanager#MaxSize100",
      "traits": {
        "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},

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"com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse":
{
  "type": "structure",
  "members": {
    "Grants": {
      "target": "com.amazonaws.licensemanager#GrantList",
      "traits": {
        "smithy.api#documentation": "<p>Lists the grants the organization has received.</p>"
      }
    },
    "NextToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#ListReceivedGrantsRequest": {
  "type": "structure",
  "members": {
    "GrantArns": {
      "target": "com.amazonaws.licensemanager#ArnList",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the grants.</p>"
      }
    },
    "Filters": {
      "target": "com.amazonaws.licensemanager#FilterList",
      "traits": {
        "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n  <ul>\n    <li>\n      <p>\n        <code>ProductSKU</code>\n      </p>\n    </li>\n    <li>\n      <p>\n        <code>LicenseIssuerName</code>\n      </p>\n    </li>\n    <li>\n      <p>\n        <code>LicenseArn</code>\n      </p>\n    </li>\n    <li>\n      <p>\n        <code>GrantStatus</code>\n      </p>\n    </li>\n    <li>\n      <p>\n        <code>GranterAccountId</code>\n      </p>\n    </li>\n  </ul>"
      }
    },
    "NextToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    }
  },
}

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    "MaxResults": {
      "target": "com.amazonaws.licensemanager#MaxSize100",
      "traits": {
        "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
      }
    },
    "traits": {
      "smithy.api#input": {}
    }
  },
  "com.amazonaws.licensemanager#ListReceivedGrantsResponse": {
    "type": "structure",
    "members": {
      "Grants": {
        "target": "com.amazonaws.licensemanager#GrantList",
        "traits": {
          "smithy.api#documentation": "<p>Received grant details.</p>"
        }
      },
      "NextToken": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Token for the next set of results.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#ListReceivedLicenses": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#ListReceivedLicensesRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#ListReceivedLicensesResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      }
    ]
  }
}

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    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Lists received licenses.</p>"
  }
},
"com.amazonaws.licensemanager#ListReceivedLicensesForOrganization":
{
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    }
  ]
}

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        "target": "com.amazonaws.licensemanager#ValidationException"
    }
],
"traits": {
    "smithy.api#documentation": "<p>Lists the licenses received for all accounts in the organization.</p>"
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest": {
    "type": "structure",
    "members": {
        "Filters": {
            "target": "com.amazonaws.licensemanager#FilterList",
            "traits": {
                "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n    <ul>\n        <li>\n            <p>\n                <code>Beneficiary</code>\n            </li>\n            <li>\n                <p>\n                    <code>ProductSKU</code>\n                </p>\n            </li>\n        </ul>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        },
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse": {
    "type": "structure",
    "members": {
        "Licenses": {
            "target": "com.amazonaws.licensemanager#GrantedLicenseList",
            "traits": {
                "smithy.api#documentation": "<p>Lists the licenses the organization has received.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {

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    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
  }
}
},
"traits": {
  "smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesRequest": {
  "type": "structure",
  "members": {
    "LicenseArns": {
      "target": "com.amazonaws.licensemanager#ArnList",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the licenses.</p>"
      }
    }
  },

  "Filters": {
    "target": "com.amazonaws.licensemanager#FilterList",
    "traits": {
      "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n  <ul>\n    <li>\n      <p>\n        <code>ProductSKU</code>\n      </li>\n    <li>\n      <p>\n        <code>Status</code>\n      </li>\n    <li>\n      <p>\n        <code>Fingerprint</code>\n      </li>\n    <li>\n      <p>\n        <code>IssuerName</code>\n      </li>\n    <li>\n      <p>\n        <code>Beneficiary</code>\n      </li>\n  </ul>"
    }
  },
  "NextToken": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Token for the next set of results.</p>"
    }
  },
  "MaxResults": {
    "target": "com.amazonaws.licensemanager#MaxSize100",
    "traits": {
      "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
    }
  }
},
"traits": {
  "smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesResponse": {
  "type": "structure",

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"members": {
  "Licenses": {
    "target": "com.amazonaws.licensemanager#GrantedLicenseList",
    "traits": {
      "smithy.api#documentation": "<p>Received license details.</p>"
    }
  },

  "NextToken": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Token for the next set of results.</p>"
    }
  }
},
"traits": {
  "smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListResourceInventory": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#ListResourceInventoryRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#ListResourceInventoryResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#FailedDependencyException"
    },
    {
      "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    }
  ]
}

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    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Lists resources managed using Systems Manager inventory.</p>"
  }
},
"com.amazonaws.licensemanager#ListResourceInventoryRequest": {
  "type": "structure",
  "members": {
    "MaxResults": {
      "target": "com.amazonaws.licensemanager#BoxInteger",
      "traits": {
        "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
      }
    },
    "NextToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    },
    "Filters": {
      "target": "com.amazonaws.licensemanager#InventoryFilterList",
      "traits": {
        "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical operators are supported:</p>
<ul>
<li><code>account_id</code> - The ID of the Amazon Web Services account that owns the resource. Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</li>
<li><code>application_name</code> - The name of the application. Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>.</li>
<li><code>license_included</code> - The type of license included. Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. Possible values are <code>sql-server-enterprise</code> | <code>sql-server-standard</code> | <code>sql-server-web</code> | <code>windows-server-datacenter</code>.</li>
<li><code>platform</code> - The platform of the resource. Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>.</li>
<li><code>resource_id</code> - The ID of the resource. Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</li>
<li><code>tag:key</code> - The key/value combination of a tag assigned to the resource. Logical operators are <code>EQUALS</code> (single account) or <code>EQUALS</code> | <code>NOT_EQUALS</code> (cross account).</li>
</ul>"
      }
    }
  }
},
"traits": {
  "smithy.api#input": {}
}
},

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"com.amazonaws.licensemanager#ListResourceInventoryResponse": {
  "type": "structure",
  "members": {
    "ResourceInventoryList": {
      "target": "com.amazonaws.licensemanager#ResourceInventoryList",
      "traits": {
        "smithy.api#documentation": "<p>Information
about the resources.</p>"
      }
    },
    "NextToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#ListTagsForResource": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#ListTagsForResourceRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#ListTagsForResourceResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Lists the tags for the specified license configuration.</p>"
  }
}

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    }
  },
  "com.amazonaws.licensemanager#ListTagsForResourceRequest": {
    "type": "structure",
    "members": {
      "ResourceArn": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
        }
      },
      "smithy.api#required": {}
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#ListTagsForResourceResponse": {
  "type": "structure",
  "members": {
    "Tags": {
      "target": "com.amazonaws.licensemanager#TagList",
      "traits": {
        "smithy.api#documentation": "<p>Information about the tags.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#ListTokens": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#ListTokensRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#ListTokensResponse"
  },
  "errors":
[
  {
    "target": "com.amazonaws.licensemanager#AccessDeniedException"
  },
  {
    "target": "com.amazonaws.licensemanager#AuthorizationException"
  }
]

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    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Lists your tokens.</p>"
  }
},
"com.amazonaws.licensemanager#ListTokensRequest": {
  "type": "structure",
  "members": {
    "TokenIds": {
      "target": "com.amazonaws.licensemanager#StringList",
      "traits": {
        "smithy.api#documentation": "<p>Token IDs.</p>"
      }
    },
    "Filters": {
      "target": "com.amazonaws.licensemanager#FilterList",
      "traits": {
        "smithy.api#documentation": "<p>Filters to scope the results. The following filter is supported:</p>\n
<ul>\n  <li>\n    <p>\n      <code>LicenseArns</code>\n    </p>\n  </li>\n</ul>"
      }
    }
  },
  "NextToken": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Token for the next set of results.</p>"
    }
  },
  "MaxResults": {
    "target": "com.amazonaws.licensemanager#MaxSize100",
    "traits": {
      "smithy.api#documentation":
        "<p>Maximum number of results to return in a single call.</p>"
    }
  }
},
"traits": {

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    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#ListTokensResponse": {
  "type": "structure",
  "members": {
    "Tokens": {
      "target": "com.amazonaws.licensemanager#TokenList",
      "traits": {
        "smithy.api#documentation": "<p>Received token details.</p>"
      }
    },
    "NextToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#ListUsageForLicenseConfiguration":
{
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    }
  ],

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```

    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Lists all license usage records for a license configuration, displaying
license\n    consumption details by resource at a selected point in time. Use this action to audit the\n    current
license consumption for any license inventory and configuration.</p>"
  }
},
"com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest": {
  "type": "structure",
  "members": {
    "LicenseConfigurationArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
        "smithy.api#required": {}
      }
    },
    "MaxResults": {
      "target": "com.amazonaws.licensemanager#BoxInteger",
      "traits": {
        "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
      }
    },
    "NextToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    },
    "Filters": {
      "target": "com.amazonaws.licensemanager#Filters",
      "traits": {
        "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
operators\n    are supported:</p>\n    <ul>\n      <li>\n        <p>\n          <code>resourceArn</code> - The ARN of the license configuration resource.\n          Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n        </li>\n      <li>\n        <p>\n          <code>resourceType</code> - The resource type
(<code>EC2_INSTANCE</code> | <code>EC2_HOST</code> | <code>EC2_AMI</code> |
<code>SYSTEMS_MANAGER_MANAGED_INSTANCE</code>). \n          Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n        </li>\n      <li>\n        <p>\n          <code>resourceAccount</code> - The ID of the account that owns the resource. \n          Logical operators
are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n        </li>\n    </ul>"
      }
    }
  }
}

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    },
    "traits": {
      "smithy.api#input": {}
    }
  },
  "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse": {
    "type": "structure",
    "members": {
      "LicenseConfigurationUsageList": {
        "target": "com.amazonaws.licensemanager#LicenseConfigurationUsageList",
        "traits": {
          "smithy.api#documentation": "<p>Information about the license configurations.</p>"
        }
      },
      "NextToken": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Token for the next set of results.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#Location": {
    "type": "string"
  },
  "com.amazonaws.licensemanager#Long": {
    "type": "long"
  },
  "com.amazonaws.licensemanager#ManagedResourceSummary": {
    "type": "structure",
    "members": {
      "ResourceType":
    {
      "target": "com.amazonaws.licensemanager#ResourceType",
      "traits": {
        "smithy.api#documentation": "<p>Type of resource associated with a license.</p>"
      }
    },
      "AssociationCount": {
        "target": "com.amazonaws.licensemanager#BoxLong",
        "traits": {
          "smithy.api#documentation": "<p>Number of resources associated with licenses.</p>"
        }
      }
    }
  }
}

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    },
    "traits": {
      "smithy.api#documentation": "<p>Summary information about a managed resource.</p>"
    }
  },
  "com.amazonaws.licensemanager#ManagedResourceSummaryList": {
    "type": "list",
    "member": {
      "target": "com.amazonaws.licensemanager#ManagedResourceSummary"
    }
  },
  "com.amazonaws.licensemanager#MaxSize100": {
    "type": "integer",
    "traits": {
      "smithy.api#range": {
        "min": 1,
        "max": 100
      }
    }
  },
  "com.amazonaws.licensemanager#MaxSize3StringList": {
    "type": "list",
    "member": {
      "target": "com.amazonaws.licensemanager#String"
    },
    "traits": {
      "smithy.api#length": {
        "min": 0,
        "max": 3
      }
    }
  },
  "com.amazonaws.licensemanager#Message": {
    "type": "string"
  },
  "com.amazonaws.licensemanager#Metadata": {
    "type": "structure",
    "members": {
      "Name": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>The key name.</p>"
        }
      }
    }
  },
  "Value": {
    "target": "com.amazonaws.licensemanager#String",

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    "traits": {
      "smithy.api#documentation": "<p>The value.</p>"
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Describes key/value pairs.</p>"
  }
},
"com.amazonaws.licensemanager#MetadataList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#Metadata"
  }
},
"com.amazonaws.licensemanager#NoEntitlementsAllowedException": {
  "type": "structure",
  "members": {
    "Message": {
      "target": "com.amazonaws.licensemanager#Message"
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>There are no entitlements found for this license, or the entitlement
maximum count is reached.</p>",
    "smithy.api#error": "client",
    "smithy.api#httpError": 400
  }
},
"com.amazonaws.licensemanager#Options": {
  "type": "structure",
  "members": {
    "ActivationOverrideBehavior": {
      "target": "com.amazonaws.licensemanager#ActivationOverrideBehavior",
      "traits": {
        "smithy.api#documentation": "<p>An activation option for your grant that determines the behavior of
activating a grant.\n    Activation options can only be used with granted licenses sourced from the Amazon Web
Services Marketplace. Additionally, the operation must specify the value of <code>ACTIVE</code> for the\n
<code>Status</code> parameter.</p>\n    <ul>\n      <li>\n        <p>As a license administrator, you can
optionally specify an\n          <code>ActivationOverrideBehavior</code> when activating a grant.</p>\n
      </li>\n      <li>\n        <p>As a grantor, you can optionally specify an\n
<code>ActivationOverrideBehavior</code> when you activate a grant for a grantee\n          account in your
organization.</p>\n      </li>\n      <li>\n        <p>As a grantee, if the grantor creating the distributed
grant doesnt specify an\n          <code>ActivationOverrideBehavior</code>, you can optionally specify one
when you\n          are activating the grant.</p>\n      </li>\n    </ul>\n    <dl>\n
<dt>DISTRIBUTED_GRANTS_ONLY</dt>\n      <dd>\n        <p>Use this value to activate a grant
without replacing any member accounts\n          active grants for the same product.</p>\n      </dd>\n
<dt>ALL_GRANTS_PERMITTED_BY_ISSUER</dt>\n      <dd>\n        <p>Use this value to activate a

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grant and disable other active grants in any\n          member accounts
for the same product. This action will also replace their\n          previously activated grants with this activated
grant.</p>\n          </dd>\n          </dl>"
    }
  }
},
"traits": {
  "smithy.api#documentation": "<p>The options you can specify when you create a new version of a grant,
such as activation\n          override behavior. For more information, see <a
href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-licenses.html\">Granted licenses in
License Manager</a> in the <i>License Manager User Guide</i>.</p>"
  }
},
"com.amazonaws.licensemanager#OrganizationConfiguration": {
  "type": "structure",
  "members": {
    "EnableIntegration": {
      "target": "com.amazonaws.licensemanager#Boolean",
      "traits": {
        "smithy.api#default": false,
        "smithy.api#documentation":
"<p>Enables Organizations integration.</p>",
        "smithy.api#required": {}
      }
    }
  }
},
"traits": {
  "smithy.api#documentation": "<p>Configuration information for Organizations.</p>"
}
},
"com.amazonaws.licensemanager#PrincipalArnList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#Arn"
  },
  "traits": {
    "smithy.api#length": {
      "min": 1,
      "max": 1
    }
  }
},
"com.amazonaws.licensemanager#ProductInformation": {
  "type": "structure",
  "members": {
    "ResourceType": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {

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    "smithy.api#documentation": "<p>Resource type. The
possible values are <code>SSM_MANAGED</code> | <code>RDS</code>.</p>",
    "smithy.api#required": {}
  }
},
"ProductInformationFilterList": {
  "target": "com.amazonaws.licensemanager#ProductInformationFilterList",
  "traits": {
    "smithy.api#documentation": "<p>A Product information filter consists of a
<code>ProductInformationFilterComparator</code> which is a logical operator, a
<code>ProductInformationFilterName</code> which specifies the type of filter being declared, and a
<code>ProductInformationFilterValue</code> that specifies the value to filter on. </p>\n    <p>Accepted values
for <code>ProductInformationFilterName</code> are listed here along with descriptions and valid options for
<code>ProductInformationFilterComparator</code>. </p>\n    <p>The following filters and are supported when
the resource type \n    is <code>SSM_MANAGED</code>:</p>\n
    <ul>\n    <li>\n    <p>\n    <code>Application Name</code> - The name of the
application.\n    Logical operator is <code>EQUALS</code>.</p>\n    </li>\n    <li>\n    <p>\n    <code>Application Publisher</code> - The publisher of the application.\n    Logical
operator is <code>EQUALS</code>.</p>\n    </li>\n    <li>\n    <p>\n    <code>Application Version</code> - The version of the application.\n    Logical operator is
<code>EQUALS</code>.</p>\n    </li>\n    <li>\n    <p>\n    <code>Platform
Name</code> - The name of the platform.\n    Logical operator is <code>EQUALS</code>.</p>\n
    </li>\n    <li>\n    <p>\n    <code>Platform Type</code> - The platform type.\n
Logical operator is <code>EQUALS</code>.</p>\n
    </li>\n    <li>\n    <p>\n    <code>Tag:key</code> - The key of a tag attached to an
Amazon Web Services resource you wish to exclude from automated discovery. Logical operator is
<code>NOT_EQUALS</code>. The key for your tag must be appended to <code>Tag:</code> following the
example: <code>Tag:name-of-your-key</code>. <code>ProductInformationFilterValue</code> is optional if you
are not using values for the key.\n    </p>\n    </li>\n    <li>\n    <p>\n    <code>AccountId</code> - The 12-digit ID of an Amazon Web Services account you wish to exclude from
automated discovery.\n    Logical operator is <code>NOT_EQUALS</code>.</p>\n    </li>\n
    <li>\n    <p>\n    <code>License Included</code> - The type of license included.\n    Logical
operators are <code>EQUALS</code> and <code>NOT_EQUALS</code>.\n    Possible values are:
<code>sql-server-enterprise</code> | \n    <code>sql-server-standard</code> | \n    <code>sql-server-
web</code> | \n    <code>windows-server-datacenter</code>.</p>\n    </li>\n    </ul>\n
    <p>The following filters and logical operators are supported when the resource type\n    is
<code>RDS</code>:</p>\n    <ul>\n    <li>\n    <p>\n    <code>Engine Edition</code> -
The edition of the database engine.\n    Logical operator is <code>EQUALS</code>.\n    Possible
values are: <code>oracle-ee</code> | <code>oracle-se</code> | <code>oracle-se1</code> | <code>oracle-
se2</code>.</p>\n    </li>\n    <li>\n    <p>\n    <code>License Pack</code> - The license
pack.\n    Logical operator is <code>EQUALS</code>.\n    Possible values are: <code>data
guard</code> | \n    <code>diagnostic pack sqlt</code> | \n
    <code>tuning pack sqlt</code> | \n    <code>ols</code> | \n    <code>olap</code>.</p>\n
    </li>\n    </ul>",
    "smithy.api#required": {}
  }
}
},

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    "traits": {
      "smithy.api#documentation": "<p>Describes product information for a license configuration.</p>"
    }
  },
  "com.amazonaws.licensemanager#ProductInformationFilter": {
    "type": "structure",
    "members": {
      "ProductInformationFilterName": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Filter name.</p>",
          "smithy.api#required": {}
        }
      },
      "ProductInformationFilterValue": {
        "target": "com.amazonaws.licensemanager#StringList",

        "traits": {
          "smithy.api#documentation": "<p>Filter value.</p>"
        }
      },
      "ProductInformationFilterComparator": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Logical operator.</p>",
          "smithy.api#required": {}
        }
      }
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Describes product information filters.</p>"
  }
},
"com.amazonaws.licensemanager#ProductInformationFilterList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#ProductInformationFilter"
  }
},
"com.amazonaws.licensemanager#ProductInformationList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#ProductInformation"
  }
},
"com.amazonaws.licensemanager#ProvisionalConfiguration": {
  "type": "structure",
  "members": {

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    "MaxTimeToLiveInMinutes": {
      "target": "com.amazonaws.licensemanager#BoxInteger",
      "traits": {
        "smithy.api#documentation": "<p>Maximum time for the provisional configuration, in minutes.</p>",
        "smithy.api#required": {}
      }
    },
    "traits": {
      "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
    }
  },
  "com.amazonaws.licensemanager#RateLimitExceededException": {
    "type": "structure",
    "members": {
      "Message": {
        "target": "com.amazonaws.licensemanager#Message"
      }
    },
    "traits": {
      "aws.protocols#awsQueryError": {
        "code": "RateLimitExceeded",
        "httpResponseCode": 429
      },
      "smithy.api#documentation": "<p>Too many requests have been submitted. Try again after a brief
wait.</p>",
      "smithy.api#error": "client",
      "smithy.api#httpError": 429
    }
  },
  "com.amazonaws.licensemanager#ReceivedMetadata": {
    "type": "structure",
    "members": {
      "ReceivedStatus": {
        "target": "com.amazonaws.licensemanager#ReceivedStatus",
        "traits": {
          "smithy.api#documentation": "<p>Received status.</p>"
        }
      },
      "ReceivedStatusReason": {
        "target": "com.amazonaws.licensemanager#StatusReasonMessage",
        "traits": {
          "smithy.api#documentation": "<p>Received
status reason.</p>"
        }
      }
    },
    "AllowedOperations": {
      "target": "com.amazonaws.licensemanager#AllowedOperationList",

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    "traits": {
      "smithy.api#documentation": "<p>Allowed operations.</p>"
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Metadata associated with received licenses and grants.</p>"
  }
},
"com.amazonaws.licensemanager#ReceivedStatus": {
  "type": "enum",
  "members": {
    "PENDING_WORKFLOW": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "PENDING_WORKFLOW"
      }
    },
    "PENDING_ACCEPT": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue":
"PENDING_ACCEPT"
      }
    },
    "REJECTED": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "REJECTED"
      }
    },
    "ACTIVE": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "ACTIVE"
      }
    },
    "FAILED_WORKFLOW": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "FAILED_WORKFLOW"
      }
    },
    "DELETED": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "DELETED"
      }
    }
  }
}

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    },
    "DISABLED": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "DISABLED"
      }
    },
    "WORKFLOW_COMPLETED": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "WORKFLOW_COMPLETED"
      }
    }
  }
},
"com.amazonaws.licensemanager#RedirectException": {
  "type": "structure",
  "members": {
    "Location": {
      "target": "com.amazonaws.licensemanager#Location",
      "traits": {
        "smithy.api#httpHeader": "Location"
      }
    },
    "Message": {
      "target": "com.amazonaws.licensemanager#Message"
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>This is not the correct Region for the resource. Try again.</p>",
    "smithy.api#error": "client",
    "smithy.api#httpError": 308
  }
},
"com.amazonaws.licensemanager#RejectGrant": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#RejectGrantRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#RejectGrantResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    }
  ]
}

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    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target":
"com.amazonaws.licensemanager#ResourceLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Rejects the specified grant.</p>"
  }
},
"com.amazonaws.licensemanager#RejectGrantRequest": {
  "type": "structure",
  "members": {
    "GrantArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
        "smithy.api#required": {}
      }
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
}
},
"com.amazonaws.licensemanager#RejectGrantResponse": {
  "type": "structure",
  "members": {
    "GrantArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>Grant ARN.</p>"
      }
    }
  },
  "Status": {

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        "target": "com.amazonaws.licensemanager#GrantStatus",
        "traits": {
            "smithy.api#documentation": "<p>Grant status.</p>"
        }
    },
    "Version": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
            "smithy.api#documentation": "<p>Grant version.</p>"
        }
    }
},
"traits": {
    "smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#RenewType":
{
    "type": "enum",
    "members": {
        "NONE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "None"
            }
        },
        "WEEKLY": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Weekly"
            }
        },
        "MONTHLY": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Monthly"
            }
        }
    }
},
"com.amazonaws.licensemanager#ReportContext": {
    "type": "structure",
    "members": {
        "licenseConfigurationArns": {
            "target": "com.amazonaws.licensemanager#ArnList",
            "traits": {

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    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration that this
generator reports on.</p>",
    "smithy.api#required": {}
  }
},
"traits": {
  "smithy.api#documentation": "<p>Details of the license configuration that this generator reports on.</p>"
}
},
"com.amazonaws.licensemanager#ReportFrequency": {
  "type": "structure",
  "members": {
    "value": {
      "target": "com.amazonaws.licensemanager#Integer",
      "traits": {
        "smithy.api#documentation": "<p>Number of times within the frequency period that a report is
generated. \n    The only supported value is <code>1</code>.</p>"
      }
    },
    "period": {
      "target": "com.amazonaws.licensemanager#ReportFrequencyType",

      "traits": {
        "smithy.api#documentation": "<p>Time period between each report. The period can be daily, weekly,
or monthly.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Details about how frequently reports are generated.</p>"
  }
},
"com.amazonaws.licensemanager#ReportFrequencyType": {
  "type": "enum",
  "members": {
    "DAY": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "DAY"
      }
    },
    "WEEK": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "WEEK"
      }
    }
  },
}

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    "MONTH": {
      "target": "smithy.api#Unit",
      "traits":
    {
      "smithy.api#enumValue": "MONTH"
    }
  },
  "com.amazonaws.licensemanager#ReportGenerator": {
    "type": "structure",
    "members": {
      "ReportGeneratorName": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Name of the report generator.</p>"
        }
      },
      "ReportType": {
        "target": "com.amazonaws.licensemanager#ReportTypeList",
        "traits": {
          "smithy.api#documentation": "<p>Type of reports that are generated.</p>"
        }
      },
      "ReportContext": {
        "target": "com.amazonaws.licensemanager#ReportContext",
        "traits": {
          "smithy.api#documentation": "<p>License
configuration type for this generator.</p>"
        }
      },
      "ReportFrequency": {
        "target": "com.amazonaws.licensemanager#ReportFrequency",
        "traits": {
          "smithy.api#documentation": "<p>Details about how frequently reports are generated.</p>"
        }
      },
      "LicenseManagerReportGeneratorArn": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator.</p>"
        }
      },
      "LastRunStatus": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Status of the last report generation attempt.</p>"
        }
      }
    }
  }
}

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```

    },
    "LastRunFailureReason":
  {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Failure message for the last report generation attempt.</p>"
    }
  },
  "LastReportGenerationTime": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Time the last report was generated at.</p>"
    }
  },
  "ReportCreatorAccount": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>The Amazon Web Services account ID used to create the report
generator.</p>"
    }
  },
  "Description": {
    "target": "com.amazonaws.licensemanager#String",

    "traits": {
      "smithy.api#documentation": "<p>Description of the report generator.</p>"
    }
  },
  "S3Location": {
    "target": "com.amazonaws.licensemanager#S3Location",
    "traits": {
      "smithy.api#documentation": "<p>Details of the S3 bucket that report generator reports are published
to.</p>"
    }
  },
  "CreateTime": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Time the report was created.</p>"
    }
  },
  "Tags": {
    "target": "com.amazonaws.licensemanager#TagList",
    "traits": {
      "smithy.api#documentation": "<p>Tags associated with the report generator.</p>"
    }
  }
}

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}
},
"traits": {
  "smithy.api#documentation": "<p>Describe the details of a report generator.</p>"
}
},
"com.amazonaws.licensemanager#ReportGeneratorList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#ReportGenerator"
  }
},
"com.amazonaws.licensemanager#ReportGeneratorName": {
  "type": "string",
  "traits": {
    "smithy.api#length": {
      "min": 1,
      "max": 100
    }
  }
},
"com.amazonaws.licensemanager#ReportType": {
  "type": "enum",
  "members": {
    "LICENSE_CONFIGURATION_SUMMARY_REPORT": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "LicenseConfigurationSummaryReport"
      }
    }
  }
},
"LICENSE_CONFIGURATION_USAGE_REPORT": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "LicenseConfigurationUsageReport"
  }
}
},
"com.amazonaws.licensemanager#ReportTypeList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#ReportType"
  }
},
"com.amazonaws.licensemanager#ResourceInventory": {
  "type": "structure",
  "members": {

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"ResourceId": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>ID of the resource.</p>"
  }
},
"ResourceType": {
  "target": "com.amazonaws.licensemanager#ResourceType",
  "traits": {
    "smithy.api#documentation": "<p>Type of resource.</p>"
  }
},
"ResourceArn": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
  }
},
"Platform": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Platform of the resource.</p>"
  }
},
"PlatformVersion": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Platform version of the resource in the inventory.</p>"
  }
},
"ResourceOwningAccountId": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>ID of the account that owns the resource.</p>"
  }
},
"traits": {
  "smithy.api#documentation": "<p>Details about a resource.</p>"
},
"com.amazonaws.licensemanager#ResourceInventoryList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#ResourceInventory"
  }
}

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```

},
"com.amazonaws.licensemanager#ResourceLimitExceededException": {
  "type": "structure",
  "members": {
    "Message": {
      "target": "com.amazonaws.licensemanager#Message"
    }
  },
  "traits": {
    "aws.protocols#awsQueryError": {
      "code": "ResourceLimitExceeded",

      "httpResponseCode": 400
    },
    "smithy.api#documentation": "<p>Your resource limits have been exceeded.</p>",
    "smithy.api#error": "client",
    "smithy.api#httpError": 400
  }
},
"com.amazonaws.licensemanager#ResourceNotFoundException": {
  "type": "structure",
  "members": {
    "Message": {
      "target": "com.amazonaws.licensemanager#Message"
    }
  },
  "traits": {
    "aws.protocols#awsQueryError": {
      "code": "InvalidResource.NotFound",
      "httpResponseCode": 400
    },
    "smithy.api#documentation": "<p>The resource cannot be found.</p>",
    "smithy.api#error": "client",
    "smithy.api#httpError": 400
  }
},
"com.amazonaws.licensemanager#ResourceType": {
  "type": "enum",
  "members": {
    "EC2_INSTANCE": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "EC2_INSTANCE"
      }
    },
    "EC2_HOST": {
      "target": "smithy.api#Unit",
      "traits": {

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        "smithy.api#enumValue": "EC2_HOST"
    }
},
"EC2_AMI": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "EC2_AMI"
    }
},
"RDS": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "RDS"
    }
},
"SYSTEMS_MANAGER_MANAGED_INSTANCE": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "SYSTEMS_MANAGER_MANAGED_INSTANCE"
    }
}
},
"com.amazonaws.licensemanager#S3Location": {
    "type": "structure",
    "members": {
        "bucket": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Name of the S3 bucket reports are published to.</p>"
            }
        },
        "keyPrefix": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Prefix of the S3 bucket reports are published to.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Details of the S3 bucket that report generator reports are published to.</p>"
    }
},
"com.amazonaws.licensemanager#ServerInternalException": {
    "type": "structure",
    "members": {
        "Message": {

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        "target": "com.amazonaws.licensemanager#Message"
    }
},
"traits": {
    "aws.protocols#awsQueryError": {
        "code": "InternalServerError",
        "httpResponseCode": 500
    },
    "smithy.api#documentation": "<p>The server experienced an internal error. Try again.</p>",
    "smithy.api#error": "server",
    "smithy.api#httpError": 500
}
},
"com.amazonaws.licensemanager#SignedToken": {
    "type": "string",
    "traits": {
        "smithy.api#length": {
            "min": 4096
        }
    }
},
"com.amazonaws.licensemanager#StatusReasonMessage": {
    "type": "string",
    "traits":
{
    "smithy.api#length": {
        "min": 0,
        "max": 400
    },
    "smithy.api#pattern": "^[\\s\\S]+$"
}
},
"com.amazonaws.licensemanager#String": {
    "type": "string"
},
"com.amazonaws.licensemanager#StringList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#String"
    }
},
"com.amazonaws.licensemanager#Tag": {
    "type": "structure",
    "members": {
        "Key": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Tag key.</p>"
            }
        }
    }
}

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    }
  },
  "Value": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation":
"com.amazonaws.licensemanager#TagValue": {
    "type": "string",
    "member": {
      "target": "com.amazonaws.licensemanager#String"
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Details about a tag for a license configuration.</p>"
  }
},
"com.amazonaws.licensemanager#TagKeyList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#String"
  }
},
"com.amazonaws.licensemanager#TagList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#Tag"
  }
},
"com.amazonaws.licensemanager#TagResource": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#TagResourceRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#TagResourceResponse"
  },
  "errors": [
    {
      "target":
"com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    }
  ]
}

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    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Adds the specified tags to the specified license configuration.</p>"
  }
},
"com.amazonaws.licensemanager#TagResourceRequest": {
  "type": "structure",
  "members": {
    "ResourceArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits":
    {
      "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
      "smithy.api#required": {}
    }
  },
  "Tags": {
    "target": "com.amazonaws.licensemanager#TagList",
    "traits": {
      "smithy.api#documentation": "<p>One or more tags.</p>",
      "smithy.api#required": {}
    }
  }
},
"traits": {
  "smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#TagResourceResponse": {
  "type": "structure",
  "members": {},
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#TokenData": {
  "type": "structure",
  "members": {
    "TokenId": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Token ID.</p>"
      }
    }
  },
},

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"TokenType": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Type of token generated. The supported value is
<code>REFRESH_TOKEN</code>.</p>"
  }
},
"LicenseArn": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
  }
},
"ExpirationTime": {
  "target": "com.amazonaws.licensemanager#ISO8601DateTime",
  "traits": {
    "smithy.api#documentation": "<p>Token expiration time, in ISO8601-UTC
format.</p>"
  }
},
"TokenProperties": {
  "target": "com.amazonaws.licensemanager#MaxSize3StringList",
  "traits": {
    "smithy.api#documentation": "<p>Data specified by the caller.</p>"
  }
},
"RoleArns": {
  "target": "com.amazonaws.licensemanager#ArnList",
  "traits": {
    "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the roles included in the
token.</p>"
  }
},
"Status": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Token status. The possible values are
<code>AVAILABLE</code> and <code>DELETED</code>.</p>"
  }
},
"traits": {
  "smithy.api#documentation": "<p>Describes a token.</p>"
}
},
"com.amazonaws.licensemanager#TokenList": {
  "type": "list",

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    "member": {
      "target": "com.amazonaws.licensemanager#TokenData"
    }
  },
  "com.amazonaws.licensemanager#TokenString": {
    "type": "string",
    "traits": {
      "smithy.api#length": {
        "min": 0,
        "max": 4096
      },
      "smithy.api#pattern": "^\\S+$"
    }
  },
  "com.amazonaws.licensemanager#TokenType": {
    "type": "enum",
    "members": {
      "REFRESH_TOKEN": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "REFRESH_TOKEN"
        }
      }
    }
  },
  "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException":
  {
    "type": "structure",
    "members": {
      "Message": {
        "target": "com.amazonaws.licensemanager#Message"
      }
    },
    "traits": {
      "smithy.api#documentation": "<p>The digital signature method is unsupported. Try your request
again.</p>",
      "smithy.api#error": "client",
      "smithy.api#httpError": 400
    }
  },
  "com.amazonaws.licensemanager#UntagResource": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#UntagResourceRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#UntagResourceResponse"
    }
  },

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"errors": [
  {
    "target": "com.amazonaws.licensemanager#AccessDeniedException"
  },
  {
    "target": "com.amazonaws.licensemanager#AuthorizationException"
  },
  {
    "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
  },
  {
    "target": "com.amazonaws.licensemanager#RateLimitExceededException"
  },
  {
    "target": "com.amazonaws.licensemanager#ServerInternalException"
  }
],
"traits": {
  "smithy.api#documentation": "<p>Removes the specified tags from the specified license
configuration.</p>"
}
},
"com.amazonaws.licensemanager#UntagResourceRequest": {
  "type": "structure",
  "members": {
    "ResourceArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
        "smithy.api#required": {}
      }
    },
    "TagKeys": {
      "target": "com.amazonaws.licensemanager#TagKeyList",
      "traits": {
        "smithy.api#documentation": "<p>Keys identifying the tags to remove.</p>",
        "smithy.api#required": {}
      }
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#UntagResourceResponse": {
  "type": "structure",
  "members": {},

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    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#UpdateLicenseConfiguration": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
      }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Modifies the attributes of an existing license configuration.</p>"
    }
  },
  "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest": {
    "type": "structure",
    "members": {
      "LicenseConfigurationArn": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>",
          "smithy.api#required": {}
        }
      },
    },
  },

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```

"LicenseConfigurationStatus": {
  "target": "com.amazonaws.licensemanager#LicenseConfigurationStatus",
  "traits": {
    "smithy.api#documentation": "<p>New status of the license configuration.</p>"
  }
},
"LicenseRules": {
  "target": "com.amazonaws.licensemanager#StringList",
  "traits": {
    "smithy.api#documentation": "<p>New license rule. The only rule that you can add after you create a license\n
configuration is licenseAffinityToHost.</p>"
  }
},
"LicenseCount": {
  "target": "com.amazonaws.licensemanager#BoxLong",
  "traits": {
    "smithy.api#documentation": "<p>New number of licenses managed by the license
configuration.</p>"
  }
},
"LicenseCountHardLimit": {
  "target": "com.amazonaws.licensemanager#BoxBoolean",
  "traits": {
    "smithy.api#documentation": "<p>New hard limit of the number of available licenses.</p>"
  }
},
"Name": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>New name
of the license configuration.</p>"
  }
},
"Description": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>New description of the license configuration.</p>"
  }
},
"ProductInformationList": {
  "target": "com.amazonaws.licensemanager#ProductInformationList",
  "traits": {
    "smithy.api#documentation": "<p>New product information.</p>"
  }
},
"DisassociateWhenNotFound": {
  "target": "com.amazonaws.licensemanager#BoxBoolean",

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        "traits": {
            "smithy.api#documentation": "<p>When true, disassociates a resource when software is
uninstalled.</p>"
        }
    },
    "traits":
{
    "smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse": {
    "type": "structure",
    "members": {},
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
    ],
}

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    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Updates a report generator.</p>\n    <p>After you make changes to a
report generator, it starts generating new reports within 60 minutes of being updated.</p>"
  }
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest":
{
  "type": "structure",
  "members": {
    "LicenseManagerReportGeneratorArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator to
update.</p>",
        "smithy.api#required": {}
      }
    },
    "ReportGeneratorName": {
      "target": "com.amazonaws.licensemanager#ReportGeneratorName",
      "traits": {
        "smithy.api#documentation": "<p>Name of the report generator.</p>",
        "smithy.api#required": {}
      }
    },
    "Type": {
      "target": "com.amazonaws.licensemanager#ReportTypeList",
      "traits": {
        "smithy.api#documentation":
"<p>Type of reports to generate. The following report types are supported:</p>\n    <ul>\n      <li>\n
<p>License configuration report - Reports the number and details of consumed licenses for a license
configuration.</p>\n    </li>\n      <li>\n      <p>Resource report - Reports the tracked licenses and
resource consumption for a license configuration.</p>\n    </li>\n    </ul>",
        "smithy.api#required": {}
      }
    },
    "ReportContext": {
      "target": "com.amazonaws.licensemanager#ReportContext",
      "traits": {
        "smithy.api#documentation": "<p>The report context.</p>",
        "smithy.api#required": {}
      }
    },
    "ReportFrequency": {
      "target": "com.amazonaws.licensemanager#ReportFrequency",

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    "traits":
  {
    "smithy.api#documentation": "<p>Frequency by which reports are generated.</p>",
    "smithy.api#required": {}
  }
},
"ClientToken": {
  "target": "com.amazonaws.licensemanager#ClientRequestToken",
  "traits": {
    "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",
    "smithy.api#required": {}
  }
},
"Description": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Description of the report generator.</p>"
  }
}
},
"traits": {
  "smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse":
{
  "type": "structure",
  "members": {},
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    }
  ],

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    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },

    {
      "target": "com.amazonaws.licensemanager#InvalidResourceStateException"
    },
    {
      "target": "com.amazonaws.licensemanager#LicenseUsageException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Adds or removes the specified license configurations for the specified Amazon Web Services resource.</p>\n    <p>You can update the license specifications of AMIs, instances, and hosts.\n    You cannot update the license specifications for launch templates and CloudFormation templates, \n    as they send license configurations to the operation that creates the resource.</p>"
  }
},

"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest": {
  "type": "structure",
  "members": {
    "ResourceArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon Web Services resource.</p>",
        "smithy.api#required": {}
      }
    },
    "AddLicenseSpecifications": {
      "target": "com.amazonaws.licensemanager#LicenseSpecifications",
      "traits": {
        "smithy.api#documentation": "<p>ARNs of the license configurations to add.</p>"
      }
    },
    "RemoveLicenseSpecifications": {
      "target": "com.amazonaws.licensemanager#LicenseSpecifications",
      "traits": {
        "smithy.api#documentation":
"<p>ARNs of the license configurations to remove.</p>"
      }
    }
  }
}

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    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse": {
  "type": "structure",
  "members": {},
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#UpdateServiceSettings": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#UpdateServiceSettingsRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#UpdateServiceSettingsResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Updates License Manager settings for the current Region.</p>"
  }
},
"com.amazonaws.licensemanager#UpdateServiceSettingsRequest": {
  "type": "structure",
  "members": {
    "S3BucketArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {

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    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon S3 bucket where
the License
Manager information is stored.</p>"
  }
},
"SnsTopicArn": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon SNS topic used
for License Manager alerts.</p>"
  }
},
"OrganizationConfiguration": {
  "target": "com.amazonaws.licensemanager#OrganizationConfiguration",
  "traits": {
    "smithy.api#documentation": "<p>Enables integration with Organizations for cross-account
discovery.</p>"
  }
},
"EnableCrossAccountsDiscovery": {
  "target": "com.amazonaws.licensemanager#BoxBoolean",
  "traits": {
    "smithy.api#documentation": "<p>Activates cross-account discovery.</p>"
  }
}
}
},
"traits": {
  "smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateServiceSettingsResponse": {
  "type": "structure",
  "members": {},
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#UsageOperation": {
  "type": "string",
  "traits": {
    "smithy.api#length": {
      "min": 0,
      "max": 50
    }
  }
}
},
"com.amazonaws.licensemanager#ValidationException": {

```



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## 1.334 platformdirs 4.2.2

### 1.334.1 Available under license :

MIT License

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## 1.335 aws-aws-sdk-go-v2-aws-protocol-eventstream 1.6.3

### 1.335.1 Available under license :

```
// Code generated by smithy-go-codegen DO NOT EDIT.
```

```
package grafana
```

```
import (  
    "context"  
    "fmt"  
    awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"  
    "github.com/aws/aws-sdk-go-v2/aws/signer/v4"  
    "github.com/aws/aws-sdk-go-v2/service/grafana/types"  
    "github.com/aws/smithy-go/middleware"
```

```

smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. Upgrading to Grafana
// Enterprise incurs additional fees. For more information, see Upgrade a
// workspace to Grafana Enterprise (https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-Grafana-
// Enterprise.html)
// .
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
    if params == nil {
        params = &AssociateLicenseInput{}
    }

    result, metadata, err := c.invokeOperation(ctx, "AssociateLicense", params, optFns,
c.addOperationAssociateLicenseMiddlewares)
    if err != nil {
        return nil,
        err
    }

    out := result.(*AssociateLicenseOutput)
    out.ResultMetadata = metadata
    return out, nil
}

type AssociateLicenseInput struct {

    // The type of license to associate with the workspace.
    //
    // This member is required.
    LicenseType types.LicenseType

    // The ID of the workspace to associate the license with.
    //
    // This member is required.
    WorkspaceId *string

    noSmithyDocumentSerde
}

type AssociateLicenseOutput struct {

    // A structure containing data about the workspace.
    //
    // This member is required.
    Workspace *types.WorkspaceDescription

```

```

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
if err := stack.Serialize.Add(&setOperationInputMiddleware{ }, middleware.After); err != nil {
return err
}
err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{ }, middleware.After)
if err !=
nil {
return err
}
err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{ }, middleware.After)
if err != nil {
return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addLegacyEndpointContextSetter(stack, options); err != nil {
return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
return err
}
if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
return err
}
if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
return err
}
if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
return err
}
if err = addRetryMiddlewares(stack, options); err != nil {
return err
}
if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
return err
}
if err = awsmiddleware.AddRecordResponseTiming(stack);

```

```

err != nil {
    return err
}
if err = addClientUserAgent(stack, options); err != nil {
    return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
    return err
}
if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
    return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
    return err
}
if err = awsmiddleware.AddRecursionDetection(stack); err != nil {
    return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
    return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
    return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
    return err
}
if err = addDisableHTTPSMiddleware(stack,
options); err != nil {
    return err
}
return nil
}

```

```

func newServiceMetadataMiddleware_opAssociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
return &awsmiddleware.RegisterServiceMetadata{
    Region:    region,
    ServiceID: ServiceID,
    OperationName: "AssociateLicense",
}
}

```

```
}
AWS SDK for Go
Copyright 2015 Amazon.com, Inc. or its affiliates. All Rights Reserved.
Copyright 2014-2015 Stripe, Inc.
name: License Scan
```

```
on: [pull_request]
```

```
jobs:
```

```
  licensescan:
```

```
    name: License Scan
```

```
    runs-on: ubuntu-latest
```

```
    strategy:
```

```
      matrix:
```

```
        python-version: [3.9]
```

```
  steps:
```

```
    - name: Checkout target
```

```
      uses: actions/checkout@v2
```

```
      with:
```

```
        path: sdkbase
```

```
        ref: ${{ github.base_ref }}
```

```
    - name: Checkout this ref
```

```
      uses: actions/checkout@v2
```

```
      with:
```

```
        path: new-ref
```

```
        fetch-depth: 0
```

```
    - name: Get Diff
```

```
      run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
```

```
    ${{ github.sha }} > refDiffFiles.txt
```

```
    - name: Get Target Files
```

```
      run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
```

```
    - name: Checkout scancode
```

```
      uses: actions/checkout@v2
```

```
      with:
```

```
        repository: nexB/scancode-toolkit
```

```
        path: scancode-toolkit
```

```
        fetch-depth: 1
```

```
    - name: Set up Python ${{ matrix.python-version }}
```

```
      uses: actions/setup-python@v2
```

```
      with:
```

```
        python-version: ${{ matrix.python-version }}
```

```
    # ScanCode
```

```
    - name: Self-configure scancode
```

```
      working-directory: ./scancode-toolkit
```

```
      run: ./scancode --help
```

```
    - name: Run Scan code on target
```

```
      run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
```

```

toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
- name: Run Scan code on pr ref
  run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
# compare
- name: License test
  run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses
are the same. Success."; exit 0; fi
// Code generated by smithy-go-codegen DO NOT EDIT.

```

```
package licensemanager
```

```

import (
    "context"
    "fmt"
    awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
    "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
    "github.com/aws/smithy-go/middleware"
    smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
    if params == nil {
        params = &CheckInLicenseInput{}
    }

    result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
    if err != nil {
        return nil, err
    }

    out := result.(*CheckInLicenseOutput)
    out.ResultMetadata = metadata
    return out, nil
}

type CheckInLicenseInput struct {

    // License consumption token.
    //
    // This member is required.
    LicenseConsumptionToken *string

    // License beneficiary.
    Beneficiary

```



```

*string

noSmithyDocumentSerde
}

type CheckInLicenseOutput struct {
// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
if err := stack.Serialize.Add(&setOperationInputMiddleware{ }, middleware.After); err != nil {
return err
}
err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{ }, middleware.After)
if err != nil {
return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{ }, middleware.After)
if err != nil {
return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addLegacyEndpointContextSetter(stack, options); err != nil {
return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
return err
}
if err = awsmiddleware.AddClientRequestIDMiddleware(stack);
err != nil {
return err
}
if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
return err
}
if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
return err
}
if err = addRetryMiddlewares(stack, options); err != nil {

```

```

return err
}
if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
return err
}
if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
return err
}
if err = addClientUserAgent(stack, options); err != nil {
return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
return err
}
if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
return
err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
return err
}
if err = awsmiddleware.AddRecursionDetection(stack); err != nil {
return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
return err
}
return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region string) *awsmiddleware.RegisterServiceMetadata
{

```

```

return &awsmiddleware.RegisterServiceMetadata{
    Region:    region,
    ServiceID: ServiceID,
    OperationName: "CheckInLicense",
}
}
{
    "smithy": "2.0",
    "shapes": {
        "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
            "type": "integer"
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
            "type": "long"
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
            "type": "structure",
            "members": {
                "Name": {
                    "target": "smithy.api#String",
                    "traits": {
                        "smithy.api#documentation": "<p>The type of name to filter by.</p>"
                    }
                },
                "Values": {
                    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                    "traits": {
                        "smithy.api#documentation": "<p>One or more values for the name to filter by.</p>"
                    }
                },
                "Operator": {
                    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
                    "traits": {
                        "smithy.api#documentation": "<p>An operator for filtering results.</p>"
                    }
                }
            },
            "traits": {
                "smithy.api#documentation": "<p>A filter object that is used to return more specific results from a describe operation.\n    Filters can be used to match a set of resources by specific criteria.</p>"
            }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
            "type": "list",
            "member": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
            }
        },
    },
}

```

```

"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerError"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Lists the Linux subscriptions service settings.</p>",
    "smithy.api#http": {
      "code": 200,
      "method": "POST",
      "uri": "/subscription/GetServiceSettings"
    },
    "smithy.api#idempotent": {}
  }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest":
{
  "type": "structure",
  "members": {}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
  "type": "structure",
  "members": {
    "LinuxSubscriptionsDiscovery": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
      "traits": {
        "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
      }
    },
    "LinuxSubscriptionsDiscoverySettings": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
      "traits": {
        "smithy.api#documentation": "<p>Lists the settings defined for Linux subscriptions discovery. The

```

settings include if\n Organizations integration has been enabled, and which Regions data will be aggregated from.</p>

```
    }
  },
  "Status": {
    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
    "traits": {
      "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being applied.</p>"
    }
  },
  "StatusMessage": {
    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
    "traits": {
      "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings current status.</p>"
    }
  },
  "HomeRegions": {
    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
    "traits": {
      "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated data for Linux\n subscriptions.</p>"
    }
  }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
  "type": "structure",
  "members": {
    "AmiId": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The AMI ID used to launch the instance.</p>"
      }
    },
    "InstanceID": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The instance ID of the resource.</p>"
      }
    },
    "InstanceType": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The instance type of the resource.</p>"
      }
    }
  }
}
```

```

    },
    "AccountID": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The account ID which owns the instance.</p>"
      }
    },
    "Status": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The status of the instance.</p>"
      }
    },
    "Region": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The Region the instance is running in.</p>"
      }
    },
    "UsageOperation": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The usage operation of the instance. For more information, see For
more information, see\n    <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-
subscriptions-usage-operation.html\">Usage\n    operation values</a> in the <i>License Manager User
Guide</i>.</p>"
      }
    },
    "ProductCode": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
      "traits": {
        "smithy.api#documentation": "<p>The product code for the instance. For more information, see <a
href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-
operation.html\">Usage\n    operation values</a> in the <i>License Manager User Guide</i> .</p>"
      }
    },
    "LastUpdatedTime": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The time in which the last discovery
updated the instance details.</p>"
      }
    },
    "SubscriptionName": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The name of the subscription being used by the instance.</p>"
      }
    }
  }

```

```

    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Details discovered information about a running instance using Linux
subscriptions.</p>"
  }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"
  }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerError": {
  "type": "structure",
  "members": {
    "message": {
      "target": "smithy.api#String"
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>An exception occurred with the service.</p>",
    "smithy.api#error": "server"
  }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
  "type": "service",
  "version": "2018-05-10",
  "operations": [
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
    }
  ],
  "traits": {
    "aws.api#service": {
      "sdkId": "License Manager Linux Subscriptions",
      "arnNamespace": "license-manager-linux-subscriptions",
      "cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
    }
  }
}

```

```

    },
    "aws.auth#sigv4": {
      "name": "license-manager-linux-subscriptions"
    },
    "aws.protocols#restJson1": {},
    "smithy.api#cors": {
      "additionalAllowedHeaders": [
        "*",
        "content-type",
        "x-amz-content-sha256",
        "x-amz-user-agent",
        "x-amzn-platform-id",
        "x-amzn-trace-id",
        "content-length",
        "x-api-key",
        "authorization",
        "x-amz-date",

"x-amz-security-token",
        "Access-Control-Allow-Headers",
        "Access-Control-Allow-Methods",
        "Access-Control-Allow-Origin"
      ],
      "additionalExposedHeaders": [
        "x-amzn-errortype",
        "x-amzn-requestid",
        "x-amzn-trace-id"
      ]
    },
    "smithy.api#documentation": "<p>With License Manager, you can discover and track your commercial
Linux subscriptions on running Amazon EC2 instances.</p>",
    "smithy.api#title": "AWS License Manager Linux Subscriptions",
    "smithy.rules#endpointRuleSet": {
      "version": "1.0",
      "parameters": {
        "Region": {
          "builtIn": "AWS::Region",
          "required": false,
          "documentation": "The
AWS region used to dispatch the request.",
          "type": "String"
        },
        "UseDualStack": {
          "builtIn": "AWS::UseDualStack",
          "required": true,
          "default": false,
          "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not
support dual-stack, dispatching the request MAY return an error."
        }
      }
    }
  }
}

```



```
    "type": "Boolean"
  },
  "UseFIPS": {
    "builtIn": "AWS::UseFIPS",
    "required": true,
    "default": false,
    "documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the
configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
```

```
    "type": "Boolean"
  },
  "Endpoint": {
    "builtIn": "SDK::Endpoint",
    "required": false,
    "documentation": "Override the endpoint used to send this request",
    "type": "String"
  }
},
"rules": [
  {
    "conditions": [
      {
        "fn": "isSet",
        "argv": [
          {
            "ref": "Endpoint"
          }
        ]
      }
    ]
  }
],
"type": "tree",
"rules": [
  {
    "conditions": [
      {
        "fn": "booleanEquals",
        "argv": [
          {
            "ref": "UseFIPS"
          },
          true
        ]
      }
    ]
  },
  "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
  "type": "error"
},
```

```

{
  "conditions": [],
  "type": "tree",
  "rules": [
    {

      "conditions": [
        {
          "fn": "booleanEquals",
          "argv": [
            {
              "ref": "UseDualStack"
            },
            true
          ]
        }
      ],
      "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
      "type": "error"
    },
    {
      "conditions": [],

      "endpoint": {
        "url": {
          "ref": "Endpoint"
        },
        "properties": {},
        "headers": {}
      },
      "type": "endpoint"
    }
  ]
},
{
  "conditions": [],
  "type": "tree",
  "rules": [
    {
      "conditions": [
        {
          "fn": "isSet",

          "argv": [
            {
              "ref": "Region"
            }
          ]
        }
      ]
    }
  ]
}

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```

    }
  ]
}
],
"type": "tree",
"rules": [
  {
    "conditions": [
      {
        "fn": "aws.partition",
        "argv": [
          {
            "ref": "Region"
          }
        ]
      },
    ],
    "assign": "PartitionResult"
  }
],
"type": "tree",
"rules": [
  {
    "conditions": [
      {
        "fn": "booleanEquals",
        "argv": [
          {
            "ref": "UseFIPS"
          },
          true
        ]
      },
    ],
    "fn": "booleanEquals",
    "argv": [
      {
        "ref": "UseDualStack"
      },
      true
    ]
  }
],
"type": "tree",
"rules": [
  {
    "conditions": [
      {

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    "fn": "booleanEquals",
    "argv": [
      true,
      {
        "fn": "getAttr",
        "argv": [
          {
            "ref": "PartitionResult"
          },
          "supportsFIPS"
        ]
      }
    ]
  },
  {
    "fn": "booleanEquals",
    "argv": [
      true,
      {
        "fn": "getAttr",
        "argv": [
          {
            "ref": "PartitionResult"
          },
          "supportsDualStack"
        ]
      }
    ]
  },
  ],
  "type": "tree",
  "rules": [
    {
      "conditions": [],
      "type": "tree",
      "rules": [
        {
          "conditions": [],
          "endpoint": {
            "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
            "properties": {},
            "headers": {}
          },
        }
      ]
    }
  ]
}

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```

        "type": "endpoint"
      }
    ]
  }
]
},
{
  "conditions": [],
  "error": "FIPS and DualStack are enabled, but this partition does not support
one or both",
  "type": "error"
}
],
},
{
  "conditions": [
    {
      "fn": "booleanEquals",
      "argv": [
        {
          "ref": "UseFIPS"
        },
        true
      ]
    }
  ],
  "type": "tree",
  "rules": [
    {
      "conditions": [
        {
          "fn": "booleanEquals",
          "argv": [
            true,
            {
              "fn": "getAttr",
              "argv": [
                {
                  "ref": "PartitionResult"
                },
                "supportsFIPS"
              ]
            }
          ]
        }
      ]
    }
  ]
}
}

```

```

    ],
    "type": "tree",

    "rules": [
      {
        "conditions": [],
        "type": "tree",
        "rules": [
          {
            "conditions": [],
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dnsSuffix}",
              "properties": {},
              "headers": {}
            },
            "type": "endpoint"
          }
        ]
      },
      {
        "conditions": [],
        "error": "FIPS is enabled but this partition does not support FIPS",
        "type": "error"
      }
    ]
  },

  {
    "conditions": [
      {
        "fn": "booleanEquals",
        "argv": [
          {
            "ref": "UseDualStack"
          },
          true
        ]
      }
    ],
    "type": "tree",
    "rules": [
      {

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```

"conditions": [
  {
    "fn": "booleanEquals",
    "argv": [
      true,
      {
        "fn": "getAttr",
        "argv": [
          {
            "ref": "PartitionResult"
          },
          "supportsDualStack"
        ]
      }
    ]
  }
],
"type": "tree",
"rules": [
  {
    "conditions": [],
    "type": "tree",
    "rules": [
      {
        "conditions": [],

        "endpoint": {
          "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
          "properties": {},
          "headers": {}
        },
        "type": "endpoint"
      }
    ]
  }
],
},
{
  "conditions": [],
  "error": "DualStack is enabled but this partition does not support DualStack",
  "type": "error"
}
],
},
{
  "conditions": [],

```

```

        "type": "tree",
        "rules": [
            {
                "conditions": [],
                "endpoint": {
                    "url":
"https://license-manager-linux-subscriptions.{Region}.{PartitionResult#dnsSuffix}",
                    "properties": {},
                    "headers": {}
                },
                "type": "endpoint"
            }
        ]
    },
    {
        "conditions": [],
        "error": "Invalid Configuration: Missing Region",
        "type": "error"
    }
]
}
]
},
{
    "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"
        }
    },
    "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
        "UseDualStack": true
    }
},
{
    "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager-linux-subscriptions-fips.us-east-1.amazonaws.com"

```



```

    }
  },
  "params": {
    "Region": "us-east-1",
    "UseFIPS": true,
    "UseDualStack": false
  }
},
{
  "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-linux-subscriptions.us-east-1.api.aws"
    }
  },
  "params": {
    "Region": "us-east-1",
    "UseFIPS": false,
    "UseDualStack": true
  }
},
{
  "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
    }
  },
  "params": {
    "Region": "us-east-1",
    "UseFIPS": false,
    "UseDualStack": false
  }
},
{
  "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
  "expect": {
    "endpoint": {

      "url": "https://license-manager-linux-subscriptions-fips.cn-north-1.api.amazonwebservices.com.cn"
    }
  },
  "params": {
    "Region": "cn-north-1",
    "UseFIPS": true,
    "UseDualStack": true
  }
},

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{
  "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"
    }
  },
  "params": {
    "Region": "cn-north-1",
    "UseFIPS": true,
    "UseDualStack": false
  }
},
{
  "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonaws.com.cn"
    }
  },
  "params": {
    "Region": "cn-north-1",
    "UseFIPS": false,
    "UseDualStack": true
  }
},
{
  "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-linux-subscriptions.cn-north-1.amazonaws.com.cn"
    }
  },
  "params": {
    "Region": "cn-north-1",
    "UseFIPS": false,
    "UseDualStack": false
  }
},
{
  "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.api.aws"
    }
  },
  "params": {

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```

        "Region": "us-gov-east-1",
        "UseFIPS": true,
        "UseDualStack": true
    }
},
{
    "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.amazonaws.com"
        }
    },
    "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": true,
        "UseDualStack": false
    }
},
{
    "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
    "expect": {
        "endpoint":
{
            "url": "https://license-manager-linux-subscriptions.us-gov-east-1.api.aws"
        }
    },
    "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": false,
        "UseDualStack": true
    }
},
{
    "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager-linux-subscriptions.us-gov-east-1.amazonaws.com"
        }
    },
    "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": false,
        "UseDualStack": false
    }
},
{
    "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
    "expect": {

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    "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
  },
  "params": {
    "Region": "us-iso-east-1",
    "UseFIPS": true,
    "UseDualStack": true
  }
},
{
  "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
    }
  },
  "params": {
    "Region": "us-iso-east-1",
    "UseFIPS": true,
    "UseDualStack": false
  }
},
{
  "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
  "expect": {
    "error": "DualStack is enabled but this partition does not support DualStack"
  },
  "params": {
    "Region": "us-iso-east-1",
    "UseFIPS": false,
    "UseDualStack": true
  }
},
{

```

```

  "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-linux-subscriptions.us-iso-east-1.c2s.ic.gov"
    }
  },
  "params": {
    "Region": "us-iso-east-1",
    "UseFIPS": false,
    "UseDualStack": false
  }
},
{
  "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",

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    "expect": {
      "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
    },
    "params": {

      "Region": "us-isob-east-1",
      "UseFIPS": true,
      "UseDualStack": true
    }
  },
  {
    "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
      }
    },
    "params": {
      "Region": "us-isob-east-1",
      "UseFIPS": true,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region us-isob-east-1 with FIPS disabled
and DualStack enabled",
    "expect": {
      "error": "DualStack is enabled but this partition does not support DualStack"
    },
    "params": {
      "Region": "us-isob-east-1",
      "UseFIPS": false,
      "UseDualStack": true
    }
  },
  {
    "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-linux-subscriptions.us-isob-east-1.sc2s.sgov.gov"
      }
    },
    "params": {
      "Region": "us-isob-east-1",

      "UseFIPS": false,
      "UseDualStack": false
    }
  }
}

```

```

    },
    {
      "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
      "expect": {
        "endpoint": {
          "url": "https://example.com"
        }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": false,
        "Endpoint": "https://example.com"
      }
    },
    {
      "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
      "expect": {
        "endpoint": {
          "url": "https://example.com"
        }
      },
      "params": {
        "UseFIPS": false,
        "UseDualStack": false,
        "Endpoint": "https://example.com"
      }
    },
    {
      "documentation": "For custom endpoint with fips enabled and dualstack disabled",
      "expect": {
        "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
        "UseDualStack": false,

"Endpoint": "https://example.com"
      }
    },
    {
      "documentation": "For custom endpoint with fips disabled and dualstack enabled",
      "expect": {
        "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
      },

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```

        "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": true,
            "Endpoint": "https://example.com"
        }
    },
    {
        "documentation": "Missing region",
        "expect": {
            "error": "Invalid Configuration: Missing Region"
        }
    }
}
],
"version": "1.0"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
    "type": "string",
    "traits": {
        "smithy.api#enum": [
            {
                "name": "Enabled",
                "value": "Enabled",
                "documentation": "Enabled LinuxSubscriptionsDiscovery"
            },
            {
                "name": "Disabled",
                "value": "Disabled",
                "documentation": "Disabled LinuxSubscriptionsDiscovery"
            }
        ]
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings": {
    "type": "structure",
    "members": {
        "SourceRegions": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
            "traits": {
                "smithy.api#documentation": "<p>The Regions in which to discover data for Linux
subscriptions.</p>",
                "smithy.api#required": {}
            }
        },
        "OrganizationIntegration": {

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        "target": "com.amazonaws.licenseanagerlinuxsubscriptions#OrganizationIntegration",
        "traits": {
            "smithy.api#documentation": "<p>Details if you have enabled resource discovery across your
accounts in Organizations.</p>",
            "smithy.api#required": {}
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Lists the settings defined for discovering Linux subscriptions.</p>"
    }
},
"com.amazonaws.licenseanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
    "type":
"operation",
    "input": {
        "target": "com.amazonaws.licenseanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
    },
    "output": {
        "target": "com.amazonaws.licenseanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licenseanagerlinuxsubscriptions#InternalServerError"
        },
        {
            "target": "com.amazonaws.licenseanagerlinuxsubscriptions#ThrottlingException"
        },
        {
            "target": "com.amazonaws.licenseanagerlinuxsubscriptions#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists the running Amazon EC2 instances that were discovered with
commercial Linux\n  subscriptions.</p>",
        "smithy.api#http": {

"code": 200,
        "method": "POST",
        "uri": "/subscription/ListLinuxSubscriptionInstances"
    },
    "smithy.api#idempotent": {},
    "smithy.api#paginated": {
        "inputToken": "NextToken",
        "outputToken": "NextToken",
        "pageSize": "MaxResults",
        "items": "Instances"
    }
}

```



```

    }
  },
  "com.amazonaws.licenseanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest": {
    "type": "structure",
    "members": {
      "Filters": {
        "target": "com.amazonaws.licenseanagerlinuxsubscriptions#FilterList",
        "traits": {
          "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those that match one or\n    more sets of key-value pairs that you specify. For example, you can filter by the name of\n    <code>AmiID</code> with an optional operator to see subscriptions that match, partially\n    match, or don't match a certain Amazon Machine Image (AMI) ID.</p>\n    <p>The valid names for this filter are:</p>\n    <ul>\n      <li>\n        <p>\n          <code>AmiID</code>\n        </p>\n      </li>\n      <li>\n        <p>\n          <code>InstanceID</code>\n        </p>\n      </li>\n      <li>\n        <p>\n          <code>AccountID</code>\n        </p>\n      </li>\n      <li>\n        <p>\n          <code>Status</code>\n        </p>\n      </li>\n      <li>\n        <p>\n          <code>Region</code>\n        </p>\n      </li>\n      <li>\n        <p>\n          <code>UsageOperation</code>\n        </p>\n      </li>\n      <li>\n        <p>\n          <code>ProductCode</code>\n        </p>\n      </li>\n      <li>\n        <p>\n          <code>InstanceType</code>\n        </p>\n      </li>\n    </ul>\n    <p>The valid Operators for this filter are:</p>\n    <ul>\n      <li>\n        <p>\n          <code>contains</code>\n        </p>\n      </li>\n      <li>\n        <p>\n          <code>equals</code>\n        </p>\n      </li>\n      <li>\n        <p>\n          <code>NotEqual</code>\n        </p>\n      </li>\n    </ul>"
        }
      },
      "MaxResults": {
        "target": "com.amazonaws.licenseanagerlinuxsubscriptions#BoxInteger",
        "traits": {
          "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
        }
      }
    }
  },
  "NextToken": {
    "target": "smithy.api#String",
    "traits": {
      "smithy.api#documentation": "<p>Token for the next set of results.</p>",
      "smithy.api#length": {
        "min": 1,
        "max": 16384
      }
    }
  },
  "traits": {
    "smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
  }
},

```

```

"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
  "type": "structure",
  "members": {
    "Instances": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
      "traits": {
        "smithy.api#documentation":
"<p>An array that contains instance objects.</p>"
      }
    },
    "NextToken": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    }
  }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerErrorException"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Lists the Linux subscriptions that have been discovered. If you have
linked your\n  organization, the returned results will include data aggregated across your accounts in\n
Organizations.</p>",
    "smithy.api#http": {
      "code": 200,
      "method": "POST",
      "uri": "/subscription/ListLinuxSubscriptions"
    },
    "smithy.api#idempotent": {},
    "smithy.api#paginated": {

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        "inputToken": "NextToken",
        "outputToken": "NextToken",
        "pageSize": "MaxResults",
        "items": "Subscriptions"
    }
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
    "type": "structure",
    "members": {
        "Filters": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
            "traits": {
                "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those
that match one or\n    more sets of key-value pairs that you specify. For example, you can filter by the name of\n
<code>Subscription</code> with an optional operator to see subscriptions that match,\n    partially match, or don't
match a certain subscription's name.</p>\n    <p>The valid names for this filter are:</p>\n    <ul>\n
<li>\n        <p>\n            <code>Subscription</code>\n        </p>\n    </li>\n    </ul>\n
<p>The valid Operators for this filter are:</p>\n
    <ul>\n
    <li>\n        <p>\n            <code>contains</code>\n        </p>\n    </li>\n
<li>\n        <p>\n            <code>equals</code>\n        </p>\n    </li>\n
    <li>\n        <p>\n            <code>Notequal</code>\n        </p>\n    </li>\n    </ul>"
            }
        },
        "MaxResults": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        },
        "NextToken": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>",
                "smithy.api#length": {
                    "min": 1,
                    "max": 16384
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if
parameters in request increases."
        }
    }
},

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```

"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
  "type": "structure",
  "members": {
    "Subscriptions": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
      "traits": {
        "smithy.api#documentation": "<p>An array that contains subscription objects.</p>"
      }
    },
    "NextToken": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for
the next set of results.</p>"
      }
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
    "type": "string",
    "traits": {
      "smithy.api#enum": [
        {
          "name": "EQUAL",
          "value": "Equal",
          "documentation": "Equal operator"
        },
        {
          "name": "NOT_EQUAL",
          "value": "NotEqual",
          "documentation": "Not equal operator"
        },
        {
          "name": "CONTAINS",
          "value": "Contains",
          "documentation": "Contains operator"
        }
      ],
      "smithy.api#length": {
        "min": 1,
        "max": 20
      }
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration": {
    "type": "string",
    "traits": {

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    "smithy.api#enum": [
      {
        "name": "Enabled",
        "value": "Enabled",
        "documentation": "Enabled OrganizationIntegration"
      },
      {
        "name": "Disabled",
        "value": "Disabled",
        "documentation": "Disabled OrganizationIntegration"
      }
    ]
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
    "type": "list",
    "member": {
      "target": "smithy.api#String"
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
    "type": "string",
    "traits": {
      "smithy.api#enum": [
        {
          "name": "InProgress",
          "value": "InProgress",
          "documentation": "InProgress status"
        },
        {
          "name": "Completed",
          "value": "Completed",
          "documentation": "Completed status"
        },
        {
          "name": "Successful",
          "value": "Successful",
          "documentation": "Successful status"
        },
        {
          "name": "Failed",
          "value": "Failed",
          "documentation": "Failed status"
        }
      ]
    }
  },
},

```

```

"com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
  "type": "list",
  "member": {
    "target": "smithy.api#String",
    "traits":
{
    "smithy.api#length": {
      "min": 1,
      "max": 100
    }
  }
},
"traits": {
  "smithy.api#length": {
    "min": 1,
    "max": 100
  },
  "smithy.api#uniqueItems": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
  "type": "map",
  "key": {
    "target": "smithy.api#String"
  },
  "value": {
    "target": "smithy.api#String"
  }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
  "type": "structure",
  "members": {
    "Name": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The name of the subscription.</p>"
      }
    }
  },
  "Type": {
    "target": "smithy.api#String",
    "traits": {
      "smithy.api#documentation": "<p>The type of subscription. The type can be subscription-included with Amazon EC2, Bring Your Own\n  Subscription model (BYOS), or from the Amazon Web Services Marketplace. Certain subscriptions may use licensing from the\n  Amazon Web Services Marketplace as well as OS licensing from Amazon EC2 or BYOS.</p>"
    }
  },

```

```

    "InstanceCount": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
      "traits": {
        "smithy.api#documentation": "<p>The total amount of running instances using this subscription.</p>"
      }
    },
    "traits": {
      "smithy.api#documentation": "<p>An object which details a discovered Linux
subscription.</p>"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>The request was denied due to request throttling.</p>",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerError"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
      ]
    }
  }

```

```

    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Updates the service settings for Linux subscriptions.</p>",
    "smithy.api#http": {
      "code": 200,
      "method": "POST",
      "uri": "/subscription/UpdateServiceSettings"
    },
    "smithy.api#idempotent": {}
  }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest":
{
  "type": "structure",
  "members": {
    "LinuxSubscriptionsDiscovery": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
      "traits": {
        "smithy.api#documentation": "<p>Describes if the discovery of Linux subscriptions is enabled.</p>",
        "smithy.api#required": {}
      }
    },
    "LinuxSubscriptionsDiscoverySettings": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
      "traits": {
        "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The settings include if Organizations\n    integration has been enabled, and which Regions data will be aggregated from.</p>",
        "smithy.api#required": {}
      }
    },
    "AllowUpdate": {
      "target": "smithy.api#Boolean",
      "traits": {
        "smithy.api#documentation": "<p>Describes if updates are allowed to the service settings for Linux subscriptions. If you\n    allow updates, you can aggregate Linux subscription data in more than one home Region.</p>"
      }
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
    "type": "structure",
    "members": {
      "LinuxSubscriptionsDiscovery": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",

```



```

    "traits": {
      "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
    }
  },

  "LinuxSubscriptionsDiscoverySettings": {
    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
    "traits": {
      "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The settings include if Organizations\n  integration has been enabled, and which Regions data will be aggregated from.</p>"
    }
  },
  "Status": {
    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
    "traits": {
      "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being applied.</p>"
    }
  },
  "StatusMessage": {
    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
    "traits": {
      "smithy.api#documentation":
"<p>A message which details the Linux subscriptions service settings current status.</p>"
    }
  },
  "HomeRegions": {
    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
    "traits": {
      "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated data for Linux\n  subscriptions.</p>"
    }
  }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
  "type": "structure",
  "members": {
    "message": {
      "target": "smithy.api#String"
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",
    "smithy.api#error": "client"
  }
}

```

```

    }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
    "context"
    "fmt"
    awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
    "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
    "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
    "github.com/aws/smithy-go/middleware"
    smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
    if params == nil {
        params = &ListLicensesInput{}
    }

    result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
    if err != nil {
        return nil, err
    }

    out := result.(*ListLicensesOutput)
    out.ResultMetadata = metadata
    return out, nil
}

type ListLicensesInput struct {

    // Filters to scope the results. The following filters are supported:
    // - Beneficiary
    // - ProductSKU
    // - Fingerprint
    //
    // - Status
    Filters []types.Filter

    // Amazon Resource Names (ARNs) of the licenses.
    LicenseArns []string

    // Maximum number of results to return in a single call.

```

```

MaxResults *int32

// Token for the next set of results.
NextToken *string

noSmithyDocumentSerde
}

type ListLicensesOutput struct {

// License details.
Licenses []types.License

// Token for the next set of results.
NextToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
if err := stack.Serialize.Add(&setOperationInputMiddleware{ }, middleware.After); err != nil {
return err
}
err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{ }, middleware.After)
if err != nil {
return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{ }, middleware.After)
if err != nil {
return err
}
if
err := addProtocolFinalizerMiddlewares(stack, options, "ListLicenses"); err != nil {
return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addLegacyEndpointContextSetter(stack, options); err != nil {
return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
return err
}
if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
return err
}
}

```

```

if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
    return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
    return err
}
if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
    return err
}
if err = addRetryMiddlewares(stack, options); err != nil {
    return err
}
if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
    return err
}
if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
    return err
}
if err = addClientUserAgent(stack, options); err != nil {
    return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
    return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
    return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
    return err
}
if err = awsmiddleware.AddRecursionDetection(stack); err != nil {
    return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
    return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
    return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
    return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {

```

```

    return err
}
return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
return &awsmiddleware.RegisterServiceMetadata{
    Region:    region,
    ServiceID:
        ServiceID,
    OperationName: "ListLicenses",
}
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
    "context"
    "fmt"
    awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
    "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
    "github.com/aws/aws-sdk-go-v2/service/grafana/types"
    "github.com/aws/smithy-go/middleware"
    smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
    if params == nil {
        params = &DisassociateLicenseInput{}
    }

    result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
    if err != nil {
        return nil, err
    }

    out := result.(*DisassociateLicenseOutput)
    out.ResultMetadata = metadata
    return out, nil
}

type DisassociateLicenseInput struct {

// The type of license to remove from the workspace.

```

```

//
//
This member is required.
LicenseType types.LicenseType

// The ID of the workspace to remove the Grafana Enterprise license from.
//
// This member is required.
WorkspaceId *string

noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

// A structure containing information about the workspace.
//
// This member is required.
Workspace *types.WorkspaceDescription

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
if err := stack.Serialize.Add(&setOperationInputMiddleware{ }, middleware.After); err != nil {
return err
}
err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{ }, middleware.After)
if err != nil {
return err
}
err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{ }, middleware.After)
if err != nil {
return err
}
if err := addProtocolFinalizerMiddlewares(stack,
options, "DisassociateLicense"); err != nil {
return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addLegacyEndpointContextSetter(stack, options); err != nil {
return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {

```

```

return err
}
if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
return err
}
if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
return err
}
if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
return err
}
if err = addRetryMiddlewares(stack, options); err != nil {
return err
}
if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
return err
}
if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
return err
}
if err = addClientUserAgent(stack, options); err != nil {
return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
return err
}
if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
return err
}
if err = awsmiddleware.AddRecursionDetection(stack); err != nil {
return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
return err
}

```

```

}
if err = addResponseErrorMiddleware(stack); err != nil {
    return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
    return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
    return err
}
return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata
{
return &awsmiddleware.RegisterServiceMetadata{
    Region:    region,
    ServiceID: ServiceID,
    OperationName: "DisassociateLicense",
}
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
    "context"
    "fmt"
    awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
    "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
    "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
    "github.com/aws/smithy-go/middleware"
    smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license. If the account that created the license is
// the same that is performing the check out, you must specify the account as the
// beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
    if params == nil {
        params = &CheckoutLicenseInput{}
    }

    result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
    if err != nil {

```



```

return nil, err
}

out := result.(*CheckoutLicenseOutput)
out.ResultMetadata = metadata
return out, nil
}

type
CheckoutLicenseInput struct {

// Checkout type.
//
// This member is required.
CheckoutType types.CheckoutType

// Unique, case-sensitive identifier that you provide to ensure the idempotency of
// the request.
//
// This member is required.
ClientToken *string

// License entitlements.
//
// This member is required.
Entitlements []types.EntitlementData

// Key fingerprint identifying the license.
//
// This member is required.
KeyFingerprint *string

// Product SKU.
//
// This member is required.
ProductSKU *string

// License beneficiary.
Beneficiary *string

// Node ID.
NodeId *string

noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

```

```

// Checkout type.
CheckoutType types.CheckoutType

// Allowed license entitlements.
EntitlementsAllowed []types.EntitlementData

// Date and time at which the license checkout expires.
Expiration *string

// Date and time at which the license checkout is issued.
IssuedAt *string

// Amazon Resource
Name (ARN) of the checkout license.
LicenseArn *string

// License consumption token.
LicenseConsumptionToken *string

// Node ID.
NodeId *string

// Signed token.
SignedToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
if err := stack.Serialize.Add(&setOperationInputMiddleware{ }, middleware.After); err != nil {
return err
}
err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{ }, middleware.After)
if err != nil {
return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{ }, middleware.After)
if err != nil {
return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addLegacyEndpointContextSetter(stack, options); err != nil

```

```

{
    return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
    return err
}
if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
    return err
}
if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
    return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
    return err
}
if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
    return err
}
if err = addRetryMiddlewares(stack, options); err != nil {
    return err
}
if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
    return err
}
if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
    return err
}
if err = addClientUserAgent(stack, options); err != nil {
    return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack);
err != nil {
    return err
}
if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
    return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
    return err
}
if err = awsmiddleware.AddRecursionDetection(stack); err != nil {

```

```

return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
return err
}
return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
return &awsmiddleware.RegisterServiceMetadata{
Region:    region,
ServiceID: ServiceID,
OperationName: "CheckoutLicense",
}
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
"context"
"fmt"
awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
"github.com/aws/aws-sdk-go-v2/aws/signer/v4"
"github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
"github.com/aws/smithy-go/middleware"
smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
if params == nil {
params = &CheckoutBorrowLicenseInput{}
}

result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)

```

```

if err != nil {
    return nil, err
}

out := result.(*CheckoutBorrowLicenseOutput)
out.ResultMetadata = metadata
return out, nil
}

type CheckoutBorrowLicenseInput struct {

    // Unique, case-sensitive identifier
    // that you provide to ensure the idempotency of
    // the request.
    //
    // This member is required.
    ClientToken *string

    // Digital signature method. The possible value is JSON Web Signature (JWS)
    // algorithm PS384. For more information, see RFC 7518 Digital Signature with
    // RSASSA-PSS (https://tools.ietf.org/html/rfc7518#section-3.5) .
    //
    // This member is required.
    DigitalSignatureMethod types.DigitalSignatureMethod

    // License entitlements. Partial checkouts are not supported.
    //
    // This member is required.
    Entitlements []types.EntitlementData

    // Amazon Resource Name (ARN) of the license. The license must use the borrow
    // consumption configuration.
    //
    // This member is required.
    LicenseArn *string

    // Information about constraints.
    CheckoutMetadata []types.Metadata

    // Node ID.
    NodeId *string

    noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

    // Information about constraints.

```

CheckoutMetadata []types.Metadata

// Allowed license entitlements.

EntitlementsAllowed

[]types.EntitlementData

// Date and time at which the license checkout expires.

Expiration \*string

// Date and time at which the license checkout is issued.

IssuedAt \*string

// Amazon Resource Name (ARN) of the license.

LicenseArn \*string

// License consumption token.

LicenseConsumptionToken \*string

// Node ID.

NodeId \*string

// Signed token.

SignedToken \*string

// Metadata pertaining to the operation's result.

ResultMetadata middleware.Metadata

noSmithyDocumentSerde

}

func (c \*Client) addOperationCheckoutBorrowLicenseMiddlewares(stack \*middleware.Stack, options Options) (err error) {

if err := stack.Serialize.Add(&setOperationInputMiddleware{ }, middleware.After); err != nil {

return err

}

err = stack.Serialize.Add(&awsAwsjson11\_serializeOpCheckoutBorrowLicense{ }, middleware.After)

if err != nil {

return err

}

err = stack.Deserialize.Add(&awsAwsjson11\_deserializeOpCheckoutBorrowLicense{ }, middleware.After)

if err != nil {

return

err

}

if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {

return fmt.Errorf("add protocol finalizers: %v", err)

}

```

if err = addLegacyEndpointContextSetter(stack, options); err != nil {
    return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
    return err
}
if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
    return err
}
if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
    return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
    return err
}
if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
    return err
}
if err = addRetryMiddlewares(stack, options); err != nil {
    return err
}
if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
    return err
}
if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
    return err
}
if err = addClientUserAgent(stack, options); err != nil {
    return
err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
    return err
}
if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
    return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
    return err
}
if err = awsmiddleware.AddRecursionDetection(stack); err != nil {

```

```

return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
return err
}
return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region
string) *awsmiddleware.RegisterServiceMetadata {
return &awsmiddleware.RegisterServiceMetadata{
Region:    region,
ServiceID: ServiceID,
OperationName: "CheckoutBorrowLicense",
}
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
"context"
"fmt"
awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
"github.com/aws/aws-sdk-go-v2/aws/signer/v4"
"github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
"github.com/aws/smithy-go/middleware"
smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
if params == nil {
params = &CreateLicenseInput{}
}

result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)

```



```

if err != nil {
    return nil, err
}

out := result.(*CreateLicenseOutput)
out.ResultMetadata = metadata
return out, nil
}

type CreateLicenseInput struct {

    // License beneficiary.
    //
    // This member is required.
    Beneficiary *string

    // Unique, case-sensitive identifier that you provide
    // to ensure the idempotency of
    // the request.
    //
    // This member is required.
    ClientToken *string

    // Configuration for consumption of the license. Choose a provisional
    // configuration for workloads running with continuous connectivity. Choose a
    // borrow configuration for workloads with offline usage.
    //
    // This member is required.
    ConsumptionConfiguration *types.ConsumptionConfiguration

    // License entitlements.
    //
    // This member is required.
    Entitlements []types.Entitlement

    // Home Region for the license.
    //
    // This member is required.
    HomeRegion *string

    // License issuer.
    //
    // This member is required.
    Issuer *types.Issuer

    // License name.
    //
    // This member is required.

```

```

LicenseName *string

// Product name.
//
// This member is required.
ProductName *string

// Product SKU.
//
// This member is required.
ProductSKU *string

// Date and time range during which the license is valid, in ISO8601-UTC format.
//
// This member is required.
Validity
*types.DatetimeRange

// Information about the license.
LicenseMetadata []types.Metadata

noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

// Amazon Resource Name (ARN) of the license.
LicenseArn *string

// License status.
Status types.LicenseStatus

// License version.
Version *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
if err := stack.Serialize.Add(&setOperationInputMiddleware{ }, middleware.After); err != nil {
return err
}
err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{ }, middleware.After)
if err != nil {
return err
}
}

```

```

}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{ }, middleware.After)
if err != nil {
    return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
    return fmt.Errorf("add
protocol finalizers: %v", err)
}

if err = addLegacyEndpointContextSetter(stack, options); err != nil {
    return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
    return err
}
if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
    return err
}
if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
    return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
    return err
}
if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
    return err
}
if err = addRetryMiddlewares(stack, options); err != nil {
    return err
}
if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
    return err
}
if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
    return err
}
if err = addClientUserAgent(stack, options); err != nil {
    return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack);
err != nil {
    return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {

```

```

    return err
}
if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
    return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
    return err
}
if err = awsmiddleware.AddRecursionDetection(stack); err != nil {
    return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
    return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
    return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
    return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
    return err
}
return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
return &awsmiddleware.RegisterServiceMetadata{
    Region:    region,
    ServiceID: ServiceID,
    OperationName:
    "CreateLicense",
}
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
    "context"
    "fmt"
    awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
    "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
    "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
    "github.com/aws/smithy-go/middleware"
    smithyhttp "github.com/aws/smithy-go/transport/http"
)

```

```

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
    if params == nil {
        params = &GetLicenseInput{}
    }

    result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
    if err != nil {
        return nil, err
    }

    out := result.(*GetLicenseOutput)
    out.ResultMetadata = metadata
    return out, nil
}

type GetLicenseInput struct {

    // Amazon Resource Name (ARN) of the license.
    //
    // This member is required.
    LicenseArn *string

    // License version.
    Version
    *string

    noSmithyDocumentSerde
}

type GetLicenseOutput struct {

    // License details.
    License *types.License

    // Metadata pertaining to the operation's result.
    ResultMetadata middleware.Metadata

    noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
    if err := stack.Serialize.Add(&setOperationInputMiddleware{ }, middleware.After); err != nil {
        return err
    }
}

```

```

err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{ }, middleware.After)
if err != nil {
    return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{ }, middleware.After)
if err != nil {
    return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
    return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addLegacyEndpointContextSetter(stack, options); err != nil {
    return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
    return
err
}
if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
    return err
}
if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
    return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
    return err
}
if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
    return err
}
if err = addRetryMiddlewares(stack, options); err != nil {
    return err
}
if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
    return err
}
if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
    return err
}
if err = addClientUserAgent(stack, options); err != nil {
    return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
    return err
}

```

```

}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
    return err
}
if err = addOpGetLicenseValidationMiddleware(stack);
err != nil {
    return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
    return err
}
if err = awsmiddleware.AddRecursionDetection(stack); err != nil {
    return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
    return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
    return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
    return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
    return err
}
return nil
}

```

```

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
    return &awsmiddleware.RegisterServiceMetadata{
        Region:    region,
        ServiceID: ServiceID,
        OperationName: "GetLicense",
    }
}

```

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// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

```
import (  
    "context"  
    "fmt"  
    awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"  
    "github.com/aws/aws-sdk-go-v2/aws/signer/v4"  
    "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"  
    "github.com/aws/smithy-go/middleware"  
    smithyhttp "github.com/aws/smithy-go/transport/http"  
)  
  
// Lists received licenses.  
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns  
...func(*Options)) (*ListReceivedLicensesOutput, error) {  
    if params == nil {  
        params = &ListReceivedLicensesInput{}  
    }  
  
    result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,  
c.addOperationListReceivedLicensesMiddlewares)  
    if err != nil {  
        return nil, err  
    }  
  
    out := result.(*ListReceivedLicensesOutput)  
    out.ResultMetadata = metadata  
    return out, nil  
}
```



```

type ListReceivedLicensesInput struct {

    // Filters to scope the results. The following filters are supported:
    //
    // - ProductSKU
    // - Status
    // - Fingerprint
    // - IssuerName
    // - Beneficiary
    Filters []types.Filter

    // Amazon Resource Names (ARNs) of the licenses.
    LicenseArns []string

    // Maximum number of results to return in a single call.
    MaxResults *int32

    // Token for the next set of results.
    NextToken *string

    noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

    // Received license details.
    Licenses []types.GrantedLicense

    // Token for the next set of results.
    NextToken *string

    // Metadata pertaining to the operation's result.
    ResultMetadata middleware.Metadata

    noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
    if err := stack.Serialize.Add(&setOperationInputMiddleware{ }, middleware.After); err != nil {
        return err
    }
    err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{ }, middleware.After)
    if err != nil {
        return err
    }
    err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{ },

```

```

middleware.After)
if err != nil {
    return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
    return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addLegacyEndpointContextSetter(stack, options); err != nil {
    return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
    return err
}
if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
    return err
}
if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
    return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
    return err
}
if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
    return err
}
if err = addRetryMiddlewares(stack, options); err != nil {
    return err
}
if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
    return err
}
if err = awsmiddleware.AddRecordResponseTiming(stack);
err != nil {
    return err
}
if err = addClientUserAgent(stack, options); err != nil {
    return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
    return err
}
}

```

```

if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
    return err
}
if err = awsmiddleware.AddRecursionDetection(stack); err != nil {
    return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
    return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
    return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
    return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
    return err
}
return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region
string) *awsmiddleware.RegisterServiceMetadata {
return &awsmiddleware.RegisterServiceMetadata{
    Region:    region,
    ServiceID: ServiceID,
    OperationName: "ListReceivedLicenses",
}
}

```

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```

{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licenseanagerusersubscriptions#AccessDeniedException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>You don't have sufficient access to perform this action.</p>",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licenseanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
      "type": "structure",
      "members": {
        "DirectoryId": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The directory ID for an Active Directory identity provider.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation":
        "<p>Details about an Active Directory identity provider.</p>"
      }
    },
    "com.amazonaws.licenseanagerusersubscriptions#AssociateUser": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licenseanagerusersubscriptions#AssociateUserRequest"
      },
      "output": {
        "target": "com.amazonaws.licenseanagerusersubscriptions#AssociateUserResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licenseanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licenseanagerusersubscriptions#ConflictException"
        },
        {
          "target": "com.amazonaws.licenseanagerusersubscriptions#InternalServerError"
        }
      ],
    }
  }
}

```



```

    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ResourceNotFoundException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ServiceQuotaExceededException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ThrottlingException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Associates the user to an EC2 instance to utilize user-based
subscriptions.</p>\n    <note>\n    <p>Your estimated bill for charges on the number of users and related
costs will take 48\n    hours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing
status) in Amazon Web Services Billing. For more information, see <a
href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n
monthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n    </note>",
    "smithy.api#http": {
      "code": 200,
      "method": "POST",
      "uri": "/user/AssociateUser"
    },
    "smithy.api#idempotent": {}
  }
},
"com.amazonaws.licenseanagerusersubscriptions#AssociateUserRequest": {
  "type": "structure",
  "members": {
    "Username": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
        "smithy.api#required": {}
      }
    },
    "InstanceId": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The ID of the
EC2 instance, which provides user-based subscriptions.</p>",
        "smithy.api#required": {}
      }
    },
    "IdentityProvider": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#IdentityProvider",

```

```

    "traits": {
      "smithy.api#documentation": "<p>The identity provider of the user.</p>",
      "smithy.api#required": {}
    }
  },
  "Domain": {
    "target": "smithy.api#String",
    "traits": {
      "smithy.api#documentation": "<p>The domain name of the user.</p>"
    }
  }
},
"com.amazonaws.licenseanagerusersubscriptions#AssociateUserResponse": {
  "type": "structure",
  "members": {
    "InstanceUserSummary": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#InstanceUserSummary",
      "traits": {
        "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
        "smithy.api#required": {}
      }
    }
  }
},
"com.amazonaws.licenseanagerusersubscriptions#BoxInteger": {
  "type": "integer"
},
"com.amazonaws.licenseanagerusersubscriptions#ConflictException": {
  "type": "structure",
  "members": {
    "message": {
      "target": "smithy.api#String"
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>The request couldn't be completed because it conflicted with the current state of the\n  resource.</p>",
    "smithy.api#error": "server"
  }
},
"com.amazonaws.licenseanagerusersubscriptions#DeregisterIdentityProvider":
{
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licenseanagerusersubscriptions#DeregisterIdentityProviderRequest"
  },
  "output": {

```

```

    "target": "com.amazonaws.licenseanagerusersubscriptions#DeregisterIdentityProviderResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ConflictException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#InternalServerError"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ResourceNotFoundException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ServiceQuotaExceededException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ThrottlingException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Deregisters the identity provider from providing user-based
subscriptions.</p>",
    "smithy.api#http": {
      "code": 200,
      "method": "POST",
      "uri": "/identity-provider/DeregisterIdentityProvider"
    },
    "smithy.api#idempotent": {}
  }
},
"com.amazonaws.licenseanagerusersubscriptions#DeregisterIdentityProviderRequest": {
  "type": "structure",
  "members": {
    "IdentityProvider": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#IdentityProvider",
      "traits": {
        "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
        "smithy.api#required": {}
      }
    }
  },
  "Product": {
    "target": "smithy.api#String",

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```

    "traits": {
      "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
      "smithy.api#required": {}
    }
  }
},
"com.amazonaws.licenseanagerusersubscriptions#DeregisterIdentityProviderResponse": {
  "type": "structure",
  "members": {
    "IdentityProviderSummary": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#IdentityProviderSummary",
      "traits": {
        "smithy.api#documentation":
"<p>Metadata that describes the results of an identity provider operation.</p>",
        "smithy.api#required": {}
      }
    }
  }
},
"com.amazonaws.licenseanagerusersubscriptions#DisassociateUser": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licenseanagerusersubscriptions#DisassociateUserRequest"
  },
  "output": {
    "target": "com.amazonaws.licenseanagerusersubscriptions#DisassociateUserResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ConflictException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#InternalServerError"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ResourceNotFoundException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ServiceQuotaExceededException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ThrottlingException"
    },
    {

```

```

        "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
    }
],
"traits": {
    "smithy.api#documentation": "<p>Disassociates the user from an EC2 instance providing user-based
subscriptions.</p>",
    "smithy.api#http": {
        "code": 200,
        "method": "POST",
        "uri": "/user/DisassociateUser"
    },
    "smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest": {
    "type": "structure",
    "members": {
        "Username": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
                "smithy.api#required": {}
            }
        },
        "InstanceId": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
                "smithy.api#required": {}
            }
        },
        "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
                "smithy.api#documentation":
"<p>An object that specifies details for the identity provider.</p>",
                "smithy.api#required": {}
            }
        },
        "Domain": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The domain name of the user.</p>"
            }
        }
    }
}
}

```

```

    },
    "com.amazonaws.licenseanagerusersubscriptions#DisassociateUserResponse": {
      "type": "structure",
      "members": {
        "InstanceUserSummary": {
          "target": "com.amazonaws.licenseanagerusersubscriptions#InstanceUserSummary",
          "traits": {
            "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
            "smithy.api#required": {}
          }
        }
      }
    },
    "com.amazonaws.licenseanagerusersubscriptions#Filter": {
      "type": "structure",
      "members": {
        "Attribute": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The name of an attribute to use as a filter.</p>"
          }
        },
        "Operation": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The type of search (For example, eq, geq, leq)</p>"
          }
        },
        "Value": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>Value of the filter.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>A filter name and value pair that is used
to return more specific results from a describe\n    operation. Filters can be used to match a set of resources by
specific criteria, such as tags,\n    attributes, or IDs.</p>"
      }
    },
    "com.amazonaws.licenseanagerusersubscriptions#FilterList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licenseanagerusersubscriptions#Filter"
      }
    },
  },

```

```

"com.amazonaws.licenseanagerusersubscriptions#IdentityProvider": {
  "type": "union",
  "members": {
    "ActiveDirectoryIdentityProvider": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ActiveDirectoryIdentityProvider",
      "traits": {
        "smithy.api#documentation": "<p>An object that details an Active Directory identity provider.</p>"
      }
    },
    "traits": {
      "smithy.api#documentation":
"<p>Details about an identity provider.</p>"
    }
  },
  "com.amazonaws.licenseanagerusersubscriptions#IdentityProviderSummary": {
    "type": "structure",
    "members": {
      "IdentityProvider": {
        "target": "com.amazonaws.licenseanagerusersubscriptions#IdentityProvider",
        "traits": {
          "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
          "smithy.api#required": {}
        }
      },
      "Settings": {
        "target": "com.amazonaws.licenseanagerusersubscriptions#Settings",
        "traits": {
          "smithy.api#documentation": "<p>An object that details the registered identity providers product
related configuration\n settings such as the subnets to provision VPC endpoints.</p>",
          "smithy.api#required":
{}
        }
      },
      "Product": {
        "target": "smithy.api#String",
        "traits": {
          "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
          "smithy.api#required": {}
        }
      },
      "Status": {
        "target": "smithy.api#String",
        "traits": {
          "smithy.api#documentation": "<p>The status of an identity provider.</p>",
          "smithy.api#required": {}
        }
      }
    },
  },

```

```

    "FailureMessage": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The failure message associated with an identity provider.</p>"
      }
    },
    "traits": {
      "smithy.api#documentation":
"<p>Describes an identity provider.</p>"
    },
    "com.amazonaws.licenseanagerusersubscriptions#IdentityProviderSummaryList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licenseanagerusersubscriptions#IdentityProviderSummary"
      }
    },
    "com.amazonaws.licenseanagerusersubscriptions#InstanceSummary": {
      "type": "structure",
      "members": {
        "InstanceId": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
            "smithy.api#required": {}
          }
        },
        "Status": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The status
of an EC2 instance resource.</p>",
            "smithy.api#required": {}
          }
        },
        "Products": {
          "target": "com.amazonaws.licenseanagerusersubscriptions#StringList",
          "traits": {
            "smithy.api#documentation": "<p>A list of provided user-based subscription products.</p>",
            "smithy.api#required": {}
          }
        },
        "LastStatusCheckDate": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The date of the last status check.</p>"
          }
        }
      }
    }
  }
}

```



```

    }
  },
  "StatusMessage": {
    "target": "smithy.api#String",
    "traits": {
      "smithy.api#documentation": "<p>The status message for an EC2 instance.</p>"
    }
  }
}
},
"traits": {
  "smithy.api#documentation": "<p>Describes an EC2 instance providing user-based subscriptions.</p>"
}
},
"com.amazonaws.licenseanagerusersubscriptions#InstanceSummaryList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licenseanagerusersubscriptions#InstanceSummary"
  }
},
"com.amazonaws.licenseanagerusersubscriptions#InstanceUserSummary": {
  "type": "structure",
  "members": {
    "Username": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
        "smithy.api#required": {}
      }
    },
    "InstanceId": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
        "smithy.api#required": {}
      }
    }
  },
  "IdentityProvider": {
    "target": "com.amazonaws.licenseanagerusersubscriptions#IdentityProvider",
    "traits": {
      "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
      "smithy.api#required": {}
    }
  },
  "Status": {
    "target": "smithy.api#String",

```

```

    "traits": {
      "smithy.api#documentation": "<p>The status of a user associated with an EC2 instance.</p>",
      "smithy.api#required": {}
    }
  },
  "StatusMessage": {
    "target": "smithy.api#String",
    "traits": {
      "smithy.api#documentation": "<p>The status message for users of an EC2 instance.</p>"
    }
  },
  "Domain": {
    "target": "smithy.api#String",
    "traits": {
      "smithy.api#documentation": "<p>The domain name of the user.</p>"
    }
  },
  "AssociationDate": {
    "target": "smithy.api#String",
    "traits": {
      "smithy.api#documentation": "<p>The date a user was associated with an EC2 instance.</p>"
    }
  },
  "DisassociationDate": {
    "target": "smithy.api#String",
    "traits": {
      "smithy.api#documentation": "<p>The date a user was disassociated from an EC2 instance.</p>"
    }
  }
},
"traits": {
  "smithy.api#documentation": "<p>Describes users of an EC2 instance providing user-based
subscriptions.</p>"
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
  }
},
"com.amazonaws.licensemanagerusersubscriptions#InternalServerError": {
  "type": "structure",
  "members": {
    "message": {
      "target": "smithy.api#String"
    }
  }
}

```

```

    },
    "traits": {
      "smithy.api#documentation": "<p>An exception occurred with the service.</p>",
      "smithy.api#error": "server"
    }
  },
  "com.amazonaws.licenseanagerusersubscriptions#LicenseManagerUserSubscriptions": {
    "type": "service",

    "version": "2018-05-10",
    "operations": [
      {
        "target": "com.amazonaws.licenseanagerusersubscriptions#AssociateUser"
      },
      {
        "target": "com.amazonaws.licenseanagerusersubscriptions#DeregisterIdentityProvider"
      },
      {
        "target": "com.amazonaws.licenseanagerusersubscriptions#DisassociateUser"
      },
      {
        "target": "com.amazonaws.licenseanagerusersubscriptions#ListIdentityProviders"
      },
      {
        "target": "com.amazonaws.licenseanagerusersubscriptions#ListInstances"
      },
      {
        "target": "com.amazonaws.licenseanagerusersubscriptions#ListProductSubscriptions"
      },
      {
        "target": "com.amazonaws.licenseanagerusersubscriptions#ListUserAssociations"
      }
    ],
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#RegisterIdentityProvider"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#StartProductSubscription"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#StopProductSubscription"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#UpdateIdentityProviderSettings"
    }
  }
],
  "traits": {
    "aws.api#service": {

```

```

    "sdkId": "License Manager User Subscriptions",
    "arnNamespace": "license-manager-user-subscriptions",
    "cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
  },
  "aws.auth#sigv4": {
    "name": "license-manager-user-subscriptions"
  },
  "aws.protocols#restJson1": {},
  "smithy.api#cors": {
    "additionalAllowedHeaders": [
      "*",
      "content-type",
      "x-amz-content-sha256",
      "x-amz-user-agent",
      "x-amzn-platform-id",
      "x-amzn-trace-id",
      "content-length",
      "x-api-key",
      "authorization",
      "x-amz-date",
      "x-amz-security-token",
      "Access-Control-Allow-Headers",
      "Access-Control-Allow-Methods",
      "Access-Control-Allow-Origin"
    ],
    "additionalExposedHeaders": [
      "x-amzn-errortype",
      "x-amzn-requestid",
      "x-amzn-trace-id"
    ]
  }
],
  "smithy.api#documentation": "<p>With License Manager, you can create user-based subscriptions to utilize licensed software with a per user subscription fee on Amazon EC2 instances.</p>",
  "smithy.api#title": "AWS License Manager User Subscriptions",
  "smithy.rules#endpointRuleSet": {
    "version": "1.0",
    "parameters": {
      "Region": {
        "builtIn": "AWS::Region",
        "required": false,
        "documentation": "The AWS region used to dispatch the request.",
        "type": "String"
      }
    },
    "UseDualStack": {
      "builtIn": "AWS::UseDualStack",
      "required": true,
      "default": false,

```

```

        "documentation": "When true, use the dual-stack
endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
        "type": "Boolean"
    },
    "UseFIPS": {
        "builtIn": "AWS::UseFIPS",
        "required": true,
        "default": false,
        "documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the
configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
        "type": "Boolean"
    },
    "Endpoint": {
        "builtIn": "SDK::Endpoint",
        "required": false,
        "documentation": "Override the endpoint used to send this request",
        "type": "String"
    }
},
"rules": [
    {
        "conditions": [
            {
                "fn": "isSet",
                "argv": [
                    {
                        "ref": "Endpoint"
                    }
                ]
            }
        ]
    }
],
"type": "tree",
"rules": [
    {
        "conditions": [
            {
                "fn": "booleanEquals",
                "argv": [
                    {
                        "ref": "UseFIPS"
                    },
                    true
                ]
            }
        ]
    }
],
"error": "Invalid Configuration: FIPS and custom endpoint are not supported",

```

```

        "type": "error"
      },
      {
        "conditions": [
          {
            "fn": "booleanEquals",
            "argv": [
              {
                "ref": "UseDualStack"
              },
              true
            ]
          }
        ]
      }
    ],

    "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
    "type": "error"
  },
  {
    "conditions": [],
    "endpoint": {
      "url": {
        "ref": "Endpoint"
      },
      "properties": {},
      "headers": {}
    },
    "type": "endpoint"
  }
],
{
  "conditions": [
    {
      "fn": "isSet",
      "argv": [
        {
          "ref": "Region"
        }
      ]
    }
  ]
},
"type": "tree",
"rules": [
  {
    "conditions": [
      {

```

```

        "fn": "aws.partition",
        "argv": [
            {
                "ref": "Region"
            }
        ],
        "assign": "PartitionResult"
    }
],
"type": "tree",

"rules": [
    {
        "conditions": [
            {
                "fn": "booleanEquals",
                "argv": [
                    {
                        "ref": "UseFIPS"
                    },
                    true
                ]
            },
            {
                "fn": "booleanEquals",
                "argv": [
                    {
                        "ref": "UseDualStack"
                    },
                    true
                ]
            }
        ],
        "type": "tree",
        "rules": [
            {
                "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            true,
                            {
                                "fn": "getAttr",
                                "argv": [
                                    {
                                        "ref": "PartitionResult"
                                    }
                                ]
                            }
                        ]
                    }
                ]
            }
        ]
    }
]

```

```

        },
        "supportsFIPS"
    ]
}
]
},
{
    "fn": "booleanEquals",
    "argv": [
        true,
        {
            "fn": "getAttr",
            "argv": [
                {
                    "ref": "PartitionResult"
                },
                "supportsDualStack"
            ]
        }
    ]
},
],
"type": "tree",
"rules": [
    {
        "conditions": [],
        "endpoint": {
            "url": "https://license-manager-user-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
            "properties": {},
            "headers": {}
        },
        "type": "endpoint"
    }
],
},
{
    "conditions": [],
    "error": "FIPS and DualStack are enabled, but this partition does not support one or
both",
    "type": "error"
}
]
},
{
    "conditions": [

```



```

        {
            "fn": "booleanEquals",
            "argv": [
                {
                    "ref": "UseFIPS"
                },
                true
            ]
        }
    ],
    "type": "tree",

"rules": [
    {
        "conditions": [
            {
                "fn": "booleanEquals",
                "argv": [
                    true,
                    {
                        "fn": "getAttr",
                        "argv": [
                            {
                                "ref": "PartitionResult"
                            },
                            "supportsFIPS"
                        ]
                    }
                ]
            }
        ]
    },
    {
        "type": "tree",
        "rules": [
            {
                "conditions": [],
                "endpoint": {
                    "url": "https://license-manager-user-subscriptions-
fips.{Region}.{PartitionResult#dnsSuffix}",
                    "properties": {},
                    "headers": {}
                }
            },
            {
                "type": "endpoint"
            }
        ]
    },
    {

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```

        "conditions": [],
        "error": "FIPS is enabled but this partition does not support FIPS",
        "type": "error"
    }
]
},
{
    "conditions": [
        {
            "fn": "booleanEquals",
            "argv": [
                {
                    "ref": "UseDualStack"
                },
                true
            ]
        }
    ],
    "type": "tree",
    "rules": [
        {
            "conditions": [
                {
                    "fn": "booleanEquals",
                    "argv": [
                        true,
                        {
                            "fn": "getAttr",
                            "argv": [
                                {
                                    "ref": "PartitionResult"
                                },
                                "supportsDualStack"
                            ]
                        }
                    ]
                }
            ]
        }
    ],
    "type": "tree",
    "rules": [
        {
            "conditions": [],
            "endpoint": {
                "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                "properties": {},

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```

        "headers": {}
      },
      "type": "endpoint"
    }
  ]
},
{
  "conditions": [],
  "error": "DualStack is enabled but this partition does
not support DualStack",
  "type": "error"
}
]
},
{
  "conditions": [],
  "endpoint": {
    "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",
    "properties": {},
    "headers": {}
  },
  "type": "endpoint"
}
]
}
]
},
{
  "conditions":
[],
  "error": "Invalid Configuration: Missing Region",
  "type": "error"
}
]
},
"smithy.rules#endpointTests": {
  "testCases": [
    {
      "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
        }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": true,

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```

        "UseDualStack": true
    }
},
{
    "documentation":
    "For region us-east-1 with FIPS enabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager-user-subscriptions-fips.us-east-1.amazonaws.com"
        }
    },
    "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
        "UseDualStack": false
    }
},
{
    "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager-user-subscriptions.us-east-1.api.aws"
        }
    },
    "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": true
    }
},
{
    "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager-user-subscriptions.us-east-1.amazonaws.com"
        }
    },
    "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": false
    }
},
{
    "documentation": "For region cn-north-1 with
FIPS enabled and DualStack enabled",
    "expect": {

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        "endpoint": {
            "url": "https://license-manager-user-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
        }
    },
    "params": {
        "Region": "cn-north-1",
        "UseFIPS": true,
        "UseDualStack": true
    }
},
{
    "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager-user-subscriptions-fips.cn-north-1.amazonaws.com.cn"
        }
    },
    "params": {
        "Region": "cn-north-1",
        "UseFIPS": true,
        "UseDualStack": false
    }
},
{
    "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager-user-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
        }
    },
    "params": {
        "Region": "cn-north-1",
        "UseFIPS": false,
        "UseDualStack": true
    }
},
{
    "documentation": "For region cn-north-1
with FIPS disabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager-user-subscriptions.cn-north-1.amazonaws.com.cn"
        }
    },
    "params": {
        "Region": "cn-north-1",

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        "UseFIPS": false,
        "UseDualStack": false
    }
},
{
    "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.api.aws"
        }
    },
    "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": true,
        "UseDualStack": true
    }
},
{
    "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.amazonaws.com"
        }
    },
    "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": true,
        "UseDualStack": false
    }
},
{
    "documentation": "For region us-gov-east-1
with FIPS disabled and DualStack enabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager-user-subscriptions.us-gov-east-1.api.aws"
        }
    },
    "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": false,
        "UseDualStack": true
    }
},
{
    "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
    "expect": {

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        "endpoint": {
            "url": "https://license-manager-user-subscriptions.us-gov-east-1.amazonaws.com"
        }
    },
    "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": false,
        "UseDualStack": false
    }
},
{
    "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
    "expect": {
        "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
    },
    "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": true,
        "UseDualStack": true
    }
},
{
    "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
    "expect":
{
        "endpoint": {
            "url": "https://license-manager-user-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
        }
    },
    "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": true,
        "UseDualStack": false
    }
},
{
    "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
    "expect": {
        "error": "DualStack is enabled but this partition does not support DualStack"
    },
    "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": false,
        "UseDualStack":
true
    }
},

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{
  "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-user-subscriptions.us-iso-east-1.c2s.ic.gov"
    }
  },
  "params": {
    "Region": "us-iso-east-1",
    "UseFIPS": false,
    "UseDualStack": false
  }
},
{
  "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
  "expect": {
    "error": "FIPS and DualStack are enabled, but
this partition does not support one or both"
  },
  "params": {
    "Region": "us-isob-east-1",
    "UseFIPS": true,
    "UseDualStack": true
  }
},
{
  "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-user-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
    }
  },
  "params": {
    "Region": "us-isob-east-1",
    "UseFIPS": true,
    "UseDualStack": false
  }
},
},
{
  "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
  "expect": {
    "error": "DualStack is enabled but this partition does not support DualStack"
  },
  "params": {
    "Region": "us-isob-east-1",
    "UseFIPS": false,
    "UseDualStack": true
  }
}

```



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    }
  },
  {
    "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-user-subscriptions.us-isob-east-1.sc2s.sgov.gov"
      }
    },
    "params": {
      "Region": "us-isob-east-1",
      "UseFIPS": false,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
    "expect": {
      "endpoint": {
        "url": "https://example.com"
      }
    },
    "params": {
      "Region": "us-east-1",
      "UseFIPS": false,
      "UseDualStack": false,
      "Endpoint": "https://example.com"
    }
  },
  {

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    "documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
    "expect": {
      "endpoint": {
        "url": "https://example.com"
      }
    },
    "params": {
      "UseFIPS": false,
      "UseDualStack": false,
      "Endpoint": "https://example.com"
    }
  },
  {
    "documentation": "For custom endpoint with fips enabled and dualstack disabled",
    "expect": {
      "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
    },

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    "params": {
      "Region": "us-east-1",
      "UseFIPS": true,
      "UseDualStack": false,
      "Endpoint": "https://example.com"
    }
  },
  {
    "documentation": "For custom endpoint with fips disabled and dualstack enabled",
    "expect": {
      "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
    },
    "params": {
      "Region": "us-east-1",
      "UseFIPS": false,
      "UseDualStack": true,
      "Endpoint": "https://example.com"
    }
  },
  {
    "documentation": "Missing region",
    "expect": {
      "error": "Invalid Configuration: Missing Region"
    }
  }
],
"version": "1.0"
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerErrorException"
    }
  ]
}

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    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ResourceNotFoundException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ServiceQuotaExceededException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ThrottlingException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Lists the identity providers for user-based subscriptions.</p>",
    "smithy.api#http": {
      "code": 200,
      "method": "POST",
      "uri": "/identity-provider/ListIdentityProviders"
    },
    "smithy.api#paginated":
  {
    "inputToken": "NextToken",
    "outputToken": "NextToken",
    "pageSize": "MaxResults",
    "items": "IdentityProviderSummaries"
  }
  },
  "com.amazonaws.licenseanagerusersubscriptions#ListIdentityProvidersRequest": {
    "type": "structure",
    "members": {
      "MaxResults": {
        "target": "com.amazonaws.licenseanagerusersubscriptions#BoxInteger",
        "traits": {
          "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
        }
      },
      "NextToken": {
        "target": "smithy.api#String",
        "traits": {
          "smithy.api#documentation": "<p>Token for the next set of results.</p>"
        }
      }
    }
  },
  "com.amazonaws.licenseanagerusersubscriptions#ListIdentityProvidersResponse":

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{
  "type": "structure",
  "members": {
    "IdentityProviderSummaries": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",
      "traits": {
        "smithy.api#documentation": "<p>Metadata that describes the list identity providers operation.</p>",
        "smithy.api#required": {}
      }
    },
    "NextToken": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    }
  }
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstances": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerErrorException"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
    }
  ]
}

```

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],
"traits": {
  "smithy.api#documentation": "<p>Lists the EC2 instances providing user-based subscriptions.</p>",
  "smithy.api#http": {
    "code": 200,
    "method": "POST",
    "uri": "/instance/ListInstances"
  },
  "smithy.api#paginated": {
    "inputToken": "NextToken",
    "outputToken": "NextToken",
    "pageSize": "MaxResults",
    "items": "InstanceSummaries"
  }
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest": {
  "type": "structure",
  "members": {
    "MaxResults": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
      "traits": {
        "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
      }
    },
    "NextToken": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    },
    "Filters": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
      "traits": {
        "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those that match one or\n more sets of key-value pairs that you specify.</p>"
      }
    }
  }
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
  "type":
"structure",
  "members": {
    "InstanceSummaries": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",
      "traits": {
        "smithy.api#documentation": "<p>Metadata that describes the list instances operation.</p>"
      }
    }
  }
}

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    }
  },
  "NextToken": {
    "target": "smithy.api#String",
    "traits": {
      "smithy.api#documentation": "<p>Token for the next set of results.</p>"
    }
  }
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerErrorException"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Lists the user-based subscription products available from an identity provider.</p>",
    "smithy.api#http": {
      "code": 200,
      "method": "POST",
      "uri": "/user/ListProductSubscriptions"
    }
  }
}

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    },
    "smithy.api#paginated": {
      "inputToken": "NextToken",
      "outputToken": "NextToken",
      "pageSize": "MaxResults",
      "items": "ProductUserSummaries"
    }
  }
},
"com.amazonaws.licenseanagerusersubscriptions#ListProductSubscriptionsRequest": {
  "type": "structure",
  "members": {
    "Product": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The name
of the user-based subscription product.</p>",
        "smithy.api#required": {}
      }
    },
    "IdentityProvider": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#IdentityProvider",
      "traits": {
        "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
        "smithy.api#required": {}
      }
    },
    "MaxResults": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#BoxInteger",
      "traits": {
        "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
      }
    },
    "Filters": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#FilterList",
      "traits": {
        "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those that match
one or\n more sets of key-value pairs that you specify.</p>"
      }
    },
    "NextToken": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    }
  }
}

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    },
    "com.amazonaws.licenseanagerusersubscriptions#ListProductSubscriptionsResponse": {
      "type": "structure",
      "members": {
        "ProductUserSummaries": {
          "target": "com.amazonaws.licenseanagerusersubscriptions#ProductUserSummaryList",
          "traits": {
            "smithy.api#documentation": "<p>Metadata that describes the list product subscriptions
operation.</p>"
          }
        },
        "NextToken": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        }
      }
    },
    "com.amazonaws.licenseanagerusersubscriptions#ListUserAssociations": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licenseanagerusersubscriptions#ListUserAssociationsRequest"
      },
      "output": {
        "target": "com.amazonaws.licenseanagerusersubscriptions#ListUserAssociationsResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licenseanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licenseanagerusersubscriptions#ConflictException"
        },
        {
          "target":
"com.amazonaws.licenseanagerusersubscriptions#InternalServerError"
        },
        {
          "target": "com.amazonaws.licenseanagerusersubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licenseanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
          "target": "com.amazonaws.licenseanagerusersubscriptions#ThrottlingException"
        }
      ]
    }
  }
}

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    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Lists user associations for an identity provider.</p>",
    "smithy.api#http": {
      "code": 200,
      "method": "POST",
      "uri": "/user/ListUserAssociations"
    },
    "smithy.api#paginated":
  {
    "inputToken": "NextToken",
    "outputToken": "NextToken",
    "pageSize": "MaxResults",
    "items": "InstanceUserSummaries"
  }
  },
  "com.amazonaws.licenseanagerusersubscriptions#ListUserAssociationsRequest": {
    "type": "structure",
    "members": {
      "InstanceId": {
        "target": "smithy.api#String",
        "traits": {
          "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
          "smithy.api#required": {}
        }
      },
      "IdentityProvider": {
        "target": "com.amazonaws.licenseanagerusersubscriptions#IdentityProvider",
        "traits": {
          "smithy.api#documentation": "<p>An object that specifies details for the identity
provider.</p>",
          "smithy.api#required": {}
        }
      },
      "MaxResults": {
        "target": "com.amazonaws.licenseanagerusersubscriptions#BoxInteger",
        "traits": {
          "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
        }
      },
      "Filters": {
        "target": "com.amazonaws.licenseanagerusersubscriptions#FilterList",
        "traits": {

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    "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those
that match one or\n    more sets of key-value pairs that you specify.</p>"
    }
  },
  "NextToken": {
    "target": "smithy.api#String",
    "traits": {
      "smithy.api#documentation": "<p>Token for
the next set of results.</p>"
    }
  }
},
"com.amazonaws.licenseanagerusersubscriptions#ListUserAssociationsResponse": {
  "type": "structure",
  "members": {
    "InstanceUserSummaries": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#InstanceUserSummaryList",
      "traits": {
        "smithy.api#documentation": "<p>Metadata that describes the list user association operation.</p>"
      }
    },
    "NextToken": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    }
  }
},
"com.amazonaws.licenseanagerusersubscriptions#ProductUserSummary": {
  "type": "structure",
  "members": {
    "Username": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The user name from the identity provider of the user.</p>",
        "smithy.api#required": {}
      }
    },
    "Product": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
        "smithy.api#required": {}
      }
    }
  }
},

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"IdentityProvider": {
  "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
  "traits": {
    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
    "smithy.api#required": {}
  }
},
"Status": {
  "target": "smithy.api#String",
  "traits": {
    "smithy.api#documentation": "<p>The status of a product for a user.</p>",
    "smithy.api#required": {}
  }
},
"StatusMessage": {
  "target": "smithy.api#String",
  "traits": {
    "smithy.api#documentation": "<p>The status message for a product for a user.</p>"
  }
},
"Domain": {
  "target": "smithy.api#String",
  "traits": {
    "smithy.api#documentation": "<p>The domain name of the user.</p>"
  }
},
"SubscriptionStartDate": {
  "target": "smithy.api#String",
  "traits": {
    "smithy.api#documentation": "<p>The
start date of a subscription.</p>"
  }
},
"SubscriptionEndDate": {
  "target": "smithy.api#String",
  "traits": {
    "smithy.api#documentation": "<p>The end date of a subscription.</p>"
  }
},
"traits": {
  "smithy.api#documentation": "<p>The summary of the user-based subscription products for a user.</p>"
}
},
"com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
  "type": "list",
  "member": {

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    "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"
  }
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerErrorException"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Registers an identity provider for user-based subscriptions.</p>",
    "smithy.api#http": {
      "code": 200,
      "method": "POST",
      "uri": "/identity-provider/RegisterIdentityProvider"
    },
    "smithy.api#idempotent": {}
  }
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {
  "type": "structure",
  "members": {
    "IdentityProvider": {

```

```

    "target": "com.amazonaws.licenseanagerusersubscriptions#IdentityProvider",
    "traits": {
      "smithy.api#documentation": "<p>An object that specifies details for the identity
provider.</p>",
      "smithy.api#required": {}
    }
  },
  "Product": {
    "target": "smithy.api#String",
    "traits": {
      "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
      "smithy.api#required": {}
    }
  },
  "Settings": {
    "target": "com.amazonaws.licenseanagerusersubscriptions#Settings",
    "traits": {
      "smithy.api#documentation": "<p>The registered identity providers product related configuration
settings such as the\n  subnets to provision VPC endpoints.</p>"
    }
  }
},
"com.amazonaws.licenseanagerusersubscriptions#RegisterIdentityProviderResponse": {
  "type": "structure",
  "members": {
    "IdentityProviderSummary":
  {
    "target": "com.amazonaws.licenseanagerusersubscriptions#IdentityProviderSummary",
    "traits": {
      "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider
operation.</p>",
      "smithy.api#required": {}
    }
  }
  }
},
"com.amazonaws.licenseanagerusersubscriptions#ResourceNotFoundException": {
  "type": "structure",
  "members": {
    "message": {
      "target": "smithy.api#String"
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>The resource couldn't be found.</p>",
    "smithy.api#error": "client",
    "smithy.api#httpError": 404
  }
}

```

```

    }
  },
  "com.amazonaws.licenseanagerusersubscriptions#SecurityGroup": {
    "type": "string",

    "traits": {
      "smithy.api#length": {
        "min": 5,
        "max": 200
      },
      "smithy.api#pattern": "^sg-([0-9a-z]{8})([0-9a-z]{17})$"
    }
  },
  "com.amazonaws.licenseanagerusersubscriptions#ServiceQuotaExceededException": {
    "type": "structure",
    "members": {
      "message": {
        "target": "smithy.api#String"
      }
    },
    "traits": {
      "smithy.api#documentation": "<p>The request failed because a service quota is exceeded.</p>",
      "smithy.api#error": "client"
    }
  },
  "com.amazonaws.licenseanagerusersubscriptions#Settings": {
    "type": "structure",
    "members": {
      "Subnets": {
        "target": "com.amazonaws.licenseanagerusersubscriptions#Subnets",
        "traits": {
          "smithy.api#documentation":
            "<p>The subnets defined for the registered identity provider.</p>",
          "smithy.api#length": {
            "min": 1
          },
          "smithy.api#required": {}
        }
      },
      "SecurityGroupId": {
        "target": "com.amazonaws.licenseanagerusersubscriptions#SecurityGroup",
        "traits": {
          "smithy.api#documentation": "<p>A security group ID that allows inbound TCP port 1688
communication between resources in\n    your VPC and the VPC endpoint for activation servers.</p>",
          "smithy.api#required": {}
        }
      }
    }
  },

```

```

    "traits": {
      "smithy.api#documentation": "<p>The registered identity providers product related configuration settings
such as the\n    subnets to provision VPC endpoints, and the security group ID that
is associated with the VPC\n    endpoints. The security group should permit inbound TCP port 1688
communication from resources\n    in the VPC.</p>"
    }
  },
  "com.amazonaws.licenseanagerusersubscriptions#StartProductSubscription": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#StartProductSubscriptionRequest"
    },
    "output": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#StartProductSubscriptionResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licenseanagerusersubscriptions#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licenseanagerusersubscriptions#ConflictException"
      },
      {
        "target": "com.amazonaws.licenseanagerusersubscriptions#InternalServerErrorException"
      },
      {
        "target": "com.amazonaws.licenseanagerusersubscriptions#ResourceNotFoundException"
      },
      {
        "target": "com.amazonaws.licenseanagerusersubscriptions#ServiceQuotaExceededException"
      },
      {
        "target": "com.amazonaws.licenseanagerusersubscriptions#ThrottlingException"
      },
      {
        "target": "com.amazonaws.licenseanagerusersubscriptions#ValidationException"
      }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Starts a product subscription for a user with the specified identity
provider.</p>\n    <note>\n    <p>Your estimated bill for charges on the number of users and related costs
will take 48\n    hours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing status)
in Amazon Web Services Billing.
For more information, see <a
href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n    monthly
charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n    </note>",
      "smithy.api#http": {
        "code": 200,

```

```

        "method": "POST",
        "uri": "/user/StartProductSubscription"
    }
}
},
"com.amazonaws.licenseanageruserssubscriptions#StartProductSubscriptionRequest": {
    "type": "structure",
    "members": {
        "Username": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The user name from the identity provider of the user.</p>",
                "smithy.api#required": {}
            }
        },
        "IdentityProvider": {
            "target": "com.amazonaws.licenseanageruserssubscriptions#IdentityProvider",
            "traits": {
                "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                "smithy.api#required": {}
            }
        },
        "Product": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                "smithy.api#required": {}
            }
        },
        "Domain": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The domain name of the user.</p>"
            }
        }
    }
},
"com.amazonaws.licenseanageruserssubscriptions#StartProductSubscriptionResponse": {
    "type": "structure",
    "members": {
        "ProductUserSummary": {
            "target": "com.amazonaws.licenseanageruserssubscriptions#ProductUserSummary",
            "traits": {
                "smithy.api#documentation": "<p>Metadata that describes the start product subscription operation.</p>",
                "smithy.api#required": {}
            }
        }
    }
}

```



```

    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerErrorException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
      }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Stops a product subscription for a user with the specified identity provider.</p>",
      "smithy.api#http": {
        "code": 200,
        "method": "POST",
        "uri": "/user/StopProductSubscription"
      }
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
    "type": "structure",
    "members": {
      "Username": {

```

```

    "target": "smithy.api#String",
    "traits": {
      "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
      "smithy.api#required": {}
    }
  },
  "IdentityProvider": {
    "target": "com.amazonaws.licenseanagerusersubscriptions#IdentityProvider",
    "traits": {
      "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
      "smithy.api#required":
    }
  }
},
"Product": {
  "target": "smithy.api#String",
  "traits": {
    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
    "smithy.api#required": {}
  }
},
"Domain": {
  "target": "smithy.api#String",
  "traits": {
    "smithy.api#documentation": "<p>The domain name of the user.</p>"
  }
}
},
"com.amazonaws.licenseanagerusersubscriptions#StopProductSubscriptionResponse": {
  "type": "structure",
  "members": {
    "ProductUserSummary": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ProductUserSummary",
      "traits": {
        "smithy.api#documentation":
      }
    }
  }
},
"com.amazonaws.licenseanagerusersubscriptions#StringList": {
  "type": "list",
  "member": {
    "target": "smithy.api#String"
  }
},

```

```

"com.amazonaws.licensemanagerusersubscriptions#Subnet": {
  "type": "string",
  "traits": {
    "smithy.api#pattern": "subnet-[a-z0-9]{8,17}"
  }
},
"com.amazonaws.licensemanagerusersubscriptions#Subnets": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
  }
},
"com.amazonaws.licensemanagerusersubscriptions#ThrottlingException": {
  "type": "structure",
  "members": {
    "message": {
      "target": "smithy.api#String"
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>The request was denied because of request throttling. Retry the request.</p>",
    "smithy.api#error": "client"
  }
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerErrorException"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
    }
  ],

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```

    "traits": {
      "smithy.api#documentation": "<p>Updates additional product configuration settings for the registered
identity\n  provider.</p>",
      "smithy.api#http": {
        "code": 200,
        "method": "POST",
        "uri": "/identity-provider/UpdateIdentityProviderSettings"
      },
      "smithy.api#idempotent": {}
    }
  },
  "com.amazonaws.licenseanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
    "type": "structure",
    "members": {
      "IdentityProvider": {
        "target": "com.amazonaws.licenseanagerusersubscriptions#IdentityProvider",
        "traits": {
          "smithy.api#required": {}
        }
      },
      "Product": {
        "target": "smithy.api#String",
        "traits": {
          "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
          "smithy.api#required": {}
        }
      },
      "UpdateSettings": {
        "target": "com.amazonaws.licenseanagerusersubscriptions#UpdateSettings",
        "traits": {
          "smithy.api#documentation": "<p>Updates the registered identity providers product related
configuration settings. You can\n  update any combination of settings in a single operation such as the:</p>\n
<ul>\n  <li>\n    <p>Subnets which you want to add to provision VPC endpoints.</p>\n    </li>\n  <li>\n    <p>Subnets which you want to remove the VPC endpoints from.</p>\n    </li>\n  <li>\n    <p>Security group ID which permits traffic to the VPC endpoints.</p>\n    </li>\n  </ul>",
          "smithy.api#required": {}
        }
      }
    }
  },
  "com.amazonaws.licenseanagerusersubscriptions#UpdateIdentityProviderSettingsResponse": {
    "type": "structure",
    "members": {
      "IdentityProviderSummary": {
        "target": "com.amazonaws.licenseanagerusersubscriptions#IdentityProviderSummary",
        "traits": {
          "smithy.api#required": {}
        }
      }
    }
  }
}

```

```

    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings": {
    "type": "structure",
    "members": {
      "AddSubnets": {

        "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
        "traits": {
          "smithy.api#documentation": "<p>The ID of one or more subnets in which License Manager will
create a VPC endpoint for products that\n    require connectivity to activation servers.</p>",
          "smithy.api#required": {}
        }
      },
      "RemoveSubnets": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
        "traits": {
          "smithy.api#documentation": "<p>The ID of one or more subnets to remove.</p>",
          "smithy.api#required": {}
        }
      },
      "SecurityGroupId": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
        "traits": {
          "smithy.api#documentation": "<p>A security group ID
that allows inbound TCP port 1688 communication between resources in\n    your VPC and the VPC endpoints for
activation servers.</p>"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Updates the registered identity providers product related configuration
settings such as\n    the subnets to provision VPC endpoints.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>A parameter is not valid.</p>",
        "smithy.api#error": "client"
      }
    }
  }
}

```

```

}
}
{
  "smithy": "2.0",
  "metadata": {
    "suppressions": [
      {
        "id": "HttpMethodSemantics",
        "namespace": "*"
      },
      {
        "id": "HttpStatusCodeSemantics",
        "namespace": "*"
      },
      {
        "id": "PaginatedTrait",
        "namespace": "*"
      },
      {
        "id": "HttpHeaderTrait",
        "namespace": "*"
      },
      {
        "id": "HttpUriConflict",
        "namespace": "*"
      },
      {
        "id": "Service",
        "namespace": "*"
      }
    ]
  },
  "shapes": {
    "com.amazonaws.licensemanager#AWSLicenseManager": {
      "type": "service",
      "version": "2018-08-01",
      "operations": [
        {
          "target": "com.amazonaws.licensemanager#AcceptGrant"
        },
        {
          "target": "com.amazonaws.licensemanager#CheckInLicense"
        },
        {
          "target": "com.amazonaws.licensemanager#CheckoutBorrowLicense"
        },
        {

```

```

    "target": "com.amazonaws.licensemanager#CheckoutLicense"
  },
  {
    "target": "com.amazonaws.licensemanager#CreateGrant"
  },
  {
    "target": "com.amazonaws.licensemanager#CreateGrantVersion"
  },
  {
    "target": "com.amazonaws.licensemanager#CreateLicense"
  },
  {
    "target": "com.amazonaws.licensemanager#CreateLicenseConfiguration"
  },
  {
    "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource"
  },
  {
    "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator"
  },
  {
    "target": "com.amazonaws.licensemanager#CreateLicenseVersion"
  },
  {
    "target": "com.amazonaws.licensemanager#CreateToken"
  },
  {
    "target": "com.amazonaws.licensemanager#DeleteGrant"
  },
  {
    "target": "com.amazonaws.licensemanager#DeleteLicense"
  },
  {
    "target": "com.amazonaws.licensemanager#DeleteLicenseConfiguration"
  },
  {
    "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator"
  },
  {
    "target": "com.amazonaws.licensemanager#DeleteToken"
  },
  {
    "target": "com.amazonaws.licensemanager#ExtendLicenseConsumption"
  },
},
{
  "target": "com.amazonaws.licensemanager#GetAccessToken"
},

```

```
{
  "target": "com.amazonaws.licensemanager#GetGrant"
},
{
  "target": "com.amazonaws.licensemanager#GetLicense"
},
{
  "target": "com.amazonaws.licensemanager#GetLicenseConfiguration"
},
{
  "target": "com.amazonaws.licensemanager#GetLicenseConversionTask"
},
{
  "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGenerator"
},
{
  "target": "com.amazonaws.licensemanager#GetLicenseUsage"
},
{
  "target": "com.amazonaws.licensemanager#GetServiceSettings"
},
{
  "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration"
},
{
  "target": "com.amazonaws.licensemanager#ListDistributedGrants"
},
{
  "target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations"
},
{
  "target": "com.amazonaws.licensemanager#ListLicenseConfigurations"
},
{
  "target": "com.amazonaws.licensemanager#ListLicenseConversionTasks"
},
{
  "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators"
},
{
  "target": "com.amazonaws.licensemanager#ListLicenses"
},
{
  "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResource"
},
{
```



```

    "target": "com.amazonaws.licensemanager#ListLicenseVersions"
  },
  {
    "target": "com.amazonaws.licensemanager#ListReceivedGrants"
  },
  {
    "target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganization"
  },
  {
    "target": "com.amazonaws.licensemanager#ListReceivedLicenses"
  },
  {
    "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganization"
  },
  {
    "target": "com.amazonaws.licensemanager#ListResourceInventory"
  },
  {
    "target": "com.amazonaws.licensemanager#ListTagsForResource"
  },
  {
    "target": "com.amazonaws.licensemanager#ListTokens"
  },
  {
    "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfiguration"
  },
  {
    "target": "com.amazonaws.licensemanager#RejectGrant"
  },
  {
    "target": "com.amazonaws.licensemanager#TagResource"
  },
  {
    "target": "com.amazonaws.licensemanager#UntagResource"
  },
  {
    "target": "com.amazonaws.licensemanager#UpdateLicenseConfiguration"
  },
  {
    "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator"
  },
  {
    "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource"
  },
  {
    "target": "com.amazonaws.licensemanager#UpdateServiceSettings"
  }
],

```

```

"traits": {
  "aws.api#service": {
    "sdkId": "License Manager",
    "arnNamespace": "license-manager",
    "cloudFormationName": "LicenseManager",
    "cloudTrailEventSource": "licensemanager.amazonaws.com",
    "endpointPrefix": "license-manager"
  },
  "aws.auth#sigv4": {
    "name": "license-manager"
  },
  "aws.protocols#awsJson1_1": {},
  "smithy.api#documentation": "<p>License Manager makes it easier to manage licenses from software vendors across multiple \n      Amazon Web Services accounts and on-premises servers.</p>",
  "smithy.api#title": "AWS License Manager",
  "smithy.api#xmlNamespace": {
    "uri": "https://license-manager.amazonaws.com/doc/2018_08_01"
  },
  "smithy.rules#endpointRuleSet": {
    "version": "1.0",
    "parameters": {
      "Region": {
        "builtIn": "AWS::Region",
        "required": false,
        "documentation": "The AWS region used to dispatch the request.",
        "type": "String"
      },
      "UseDualStack": {
        "builtIn": "AWS::UseDualStack",
        "required": true,
        "default": false,
        "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
        "type": "Boolean"
      },
      "UseFIPS": {
        "builtIn": "AWS::UseFIPS",
        "required": true,
        "default": false,
        "documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
        "type": "Boolean"
      },
      "Endpoint": {
        "builtIn": "SDK::Endpoint",
        "required": false,
        "documentation": "Override the endpoint used to send this request",

```

```

        "type": "String"
    }
},
"rules": [
    {
        "conditions": [
            {
                "fn": "isSet",
                "argv": [
                    {
                        "ref": "Endpoint"
                    }
                ]
            }
        ]
    }
],
"type": "tree",
"rules": [
    {
        "conditions": [
            {
                "fn": "booleanEquals",
                "argv": [
                    {
                        "ref": "UseFIPS"
                    },
                    true
                ]
            }
        ],
        "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
        "type": "error"
    },
    {
        "conditions": [
            {
                "fn": "booleanEquals",
                "argv": [
                    {
                        "ref": "UseDualStack"
                    },
                    true
                ]
            }
        ],
        "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
        "type": "error"
    }
]

```

```

    },
    {
      "conditions": [],
      "endpoint": {
        "url": {
          "ref": "Endpoint"
        },
        "properties": {},
        "headers": {}
      },
      "type": "endpoint"
    }
  ]
},
{
  "conditions": [
    {
      "fn": "isSet",
      "argv": [
        {
          "ref": "Region"
        }
      ]
    }
  ],
  "type": "tree",
  "rules": [
    {
      "conditions": [
        {
          "fn": "aws.partition",
          "argv": [
            {
              "ref": "Region"
            }
          ]
        },
      ],
      "assign": "PartitionResult"
    }
  ],
  "type": "tree",
  "rules": [
    {
      "conditions": [
        {
          "fn": "booleanEquals",
          "argv": [
            {
              "ref":

```

"UseFIPS"

```
    },
    true
  ]
},
{
  "fn": "booleanEquals",
  "argv": [
    {
      "ref": "UseDualStack"
    },
    true
  ]
}
],
"type": "tree",
"rules": [
  {
    "conditions": [
      {
        "fn": "booleanEquals",
        "argv": [
          true,
          {
            "fn": "getAttr",
            "argv": [
              {
                "ref": "PartitionResult"
              },
              "supportsFIPS"
            ]
          }
        ]
      }
    ]
  }
],
{
  "fn": "booleanEquals",
  "argv": [
    true,
    {
      "fn": "getAttr",
      "argv": [
        {
          "ref": "PartitionResult"
        },
        ],
    ]
  }
}
```

"supportsDualStack"

]

```

        }
      ]
    }
  ],
  "type": "tree",
  "rules": [
    {
      "conditions": [],
      "endpoint": {
        "url": "https://license-manager-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
        "properties": {},
        "headers": {}
      },
      "type": "endpoint"
    }
  ],
  "error": "FIPS and DualStack are enabled, but this partition does not support one or
both",
  "type": "error"
}
],
{
  "conditions": [
    {
      "fn": "booleanEquals",
      "argv": [
        {
          "ref": "UseFIPS"
        },
        true
      ]
    }
  ],
  "type": "tree",
  "rules": [
    {
      "conditions": [
        {
          "fn": "booleanEquals",
          "argv": [
            true,

```

```

    {
        "fn": "getAttr",
        "argv": [
            {
                "ref": "PartitionResult"
            },
            "supportsFIPS"
        ]
    }
],
"type": "tree",
"rules": [

    {
        "conditions": [],
        "endpoint": {
            "url": "https://license-manager-fips.{Region}.{PartitionResult#dnsSuffix}",
            "properties": {},
            "headers": {}
        },
        "type": "endpoint"
    }
],
{
    "conditions": [],
    "error": "FIPS is enabled but this
partition does not support FIPS",
    "type": "error"
}
],
{
    "conditions": [
        {
            "fn": "booleanEquals",
            "argv": [
                {
                    "ref": "UseDualStack"
                },
                true
            ]
        }
    ]
},
"type": "tree",

```

```

"rules": [
  {
    "conditions": [
      {
        "fn": "booleanEquals",
        "argv": [
          true,
          {
            "fn": "getAttr",
            "argv": [
              {
                "ref": "PartitionResult"
              }
            ],
          }
        ],
      }
    ],
    "supportsDualStack"
  ]
},
{
  "type": "tree",
  "rules": [
    {
      "conditions": [],
      "endpoint": {
        "url": "https://license-
manager.{Region}.{PartitionResult#dualStackDnsSuffix}",
        "properties": {},
        "headers": {}
      },
      "type": "endpoint"
    }
  ],
},
{
  "conditions": [],
  "error": "DualStack is enabled but this partition does not support DualStack",
  "type": "error"
}
],
{
  "conditions": [],
  "endpoint": {
    "url": "https://license-manager.{Region}.{PartitionResult#dnsSuffix}",
    "properties": {},
    "headers": {}
  }
}

```



```

        },
        "type": "endpoint"
    }
]
}
],
},
{
    "conditions": [],
    "error": "Invalid Configuration: Missing Region",
    "type": "error"
}
]
},
"smithy.rules#endpointTests": {
    "testCases": [
        {
            "documentation": "For region af-south-1 with FIPS disabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager.af-south-1.amazonaws.com"
                }
            },
            "params": {
                "Region": "af-south-1",
                "UseFIPS": false,
                "UseDualStack": false
            }
        },
        {
            "documentation": "For region ap-east-1 with FIPS disabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager.ap-east-1.amazonaws.com"
                }
            },
            "params": {
                "Region": "ap-east-1",
                "UseFIPS": false,
                "UseDualStack": false
            }
        },
        {
            "documentation": "For region ap-northeast-1 with FIPS disabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager.ap-northeast-1.amazonaws.com"
                }
            }
        }
    ]
}

```

```

    }
  },
  "params": {
    "Region": "ap-northeast-1",
    "UseFIPS": false,
    "UseDualStack": false
  }
},
{
  "documentation": "For region ap-northeast-2 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.ap-northeast-2.amazonaws.com"
    }
  },
  "params": {
    "Region": "ap-northeast-2",
    "UseFIPS": false,
    "UseDualStack": false
  }
},
{
  "documentation": "For region ap-northeast-3 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.ap-northeast-3.amazonaws.com"
    }
  },
  "params": {
    "Region": "ap-northeast-3",
    "UseFIPS": false,
    "UseDualStack": false
  }
},
},
{
  "documentation": "For region ap-south-1 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.ap-south-1.amazonaws.com"
    }
  },
  "params": {
    "Region": "ap-south-1",
    "UseFIPS": false,
    "UseDualStack": false
  }
},
},

```

```

    {
      "documentation": "For region ap-southeast-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.ap-southeast-1.amazonaws.com"
        }
      }
    },
    {
      "params": {
        "Region": "ap-southeast-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region ap-southeast-2 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.ap-southeast-2.amazonaws.com"
        }
      }
    },
    {
      "params": {
        "Region": "ap-southeast-2",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region ap-southeast-3 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.ap-southeast-3.amazonaws.com"
        }
      }
    },
    {
      "params": {
        "Region": "ap-southeast-3",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region ca-central-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.ca-central-1.amazonaws.com"
        }
      }
    },
    {

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```

"params": {
  "Region": "ca-central-1",
  "UseFIPS": false,
  "UseDualStack": false
}
},
{
  "documentation": "For region eu-central-1 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.eu-central-1.amazonaws.com"
    }
  },
  "params": {
    "Region": "eu-central-1",
    "UseFIPS": false,
    "UseDualStack": false
  }
},
{
  "documentation": "For region eu-north-1 with FIPS
disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.eu-north-1.amazonaws.com"
    }
  },
  "params": {
    "Region": "eu-north-1",
    "UseFIPS": false,
    "UseDualStack": false
  }
},
{
  "documentation": "For region eu-south-1 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.eu-south-1.amazonaws.com"
    }
  },
  "params": {
    "Region":
"eu-south-1",
    "UseFIPS": false,
    "UseDualStack": false
  }
},

```

```

{
  "documentation": "For region eu-west-1 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.eu-west-1.amazonaws.com"
    }
  },
  "params": {
    "Region": "eu-west-1",
    "UseFIPS": false,
    "UseDualStack": false
  }
},
{
  "documentation": "For region eu-west-2 with FIPS disabled and DualStack disabled",
  "expect": {

    "endpoint": {
      "url": "https://license-manager.eu-west-2.amazonaws.com"
    }
  },
  "params": {
    "Region": "eu-west-2",
    "UseFIPS": false,
    "UseDualStack": false
  }
},
{
  "documentation": "For region eu-west-3 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.eu-west-3.amazonaws.com"
    }
  },
  "params": {
    "Region": "eu-west-3",
    "UseFIPS": false,

    "UseDualStack": false
  }
},
{
  "documentation": "For region me-south-1 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.me-south-1.amazonaws.com"
    }
  },

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    "params": {
      "Region": "me-south-1",
      "UseFIPS": false,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region sa-east-1 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager.sa-east-1.amazonaws.com"
      }
    },
    "params": {
      "Region": "sa-east-1",
      "UseFIPS": false,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager.us-east-1.amazonaws.com"
      }
    },
    "params": {
      "Region": "us-east-1",
      "UseFIPS": false,
      "UseDualStack": false
    }
  },
},
{
  "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-fips.us-east-1.amazonaws.com"
    }
  },
  "params": {
    "Region": "us-east-1",
    "UseFIPS": true,
    "UseDualStack": false
  }
},
{
  "documentation": "For region us-east-2 with FIPS disabled and DualStack disabled",

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```

    "expect": {
      "endpoint": {
        "url": "https://license-manager.us-east-2.amazonaws.com"
      }
    },
    "params": {
      "Region": "us-east-2",
      "UseFIPS": false,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region us-east-2 with FIPS enabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-fips.us-east-2.amazonaws.com"
      }
    },
    "params": {
      "Region": "us-east-2",
      "UseFIPS": true,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region
us-west-1 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager.us-west-1.amazonaws.com"
      }
    },
    "params": {
      "Region": "us-west-1",
      "UseFIPS": false,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region us-west-1 with FIPS enabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-fips.us-west-1.amazonaws.com"
      }
    },
    "params": {

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"Region": "us-west-1",
  "UseFIPS": true,
  "UseDualStack": false
}
},
{
  "documentation": "For region us-west-2 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.us-west-2.amazonaws.com"
    }
  },
  "params": {
    "Region": "us-west-2",
    "UseFIPS": false,
    "UseDualStack": false
  }
},
{
  "documentation": "For region us-west-2 with FIPS enabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-fips.us-west-2.amazonaws.com"
    }
  },
  "params": {
    "Region": "us-west-2",
    "UseFIPS": true,
    "UseDualStack": false
  }
},
{
  "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-fips.us-east-1.api.aws"
    }
  },
  "params": {
    "Region": "us-east-1",
    "UseFIPS": true,
    "UseDualStack": true
  }
},
{
  "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",

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```

    "expect": {
      "endpoint": {
        "url": "https://license-manager.us-east-1.api.aws"
      }
    },
    "params": {
      "Region": "us-east-1",
      "UseFIPS": false,
      "UseDualStack": true
    }
  },
  {
    "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url":
"https://license-manager.cn-north-1.amazonaws.com.cn"
      }
    },
    "params": {
      "Region": "cn-north-1",
      "UseFIPS": false,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region cn-northwest-1 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager.cn-northwest-1.amazonaws.com.cn"
      }
    },
    "params": {
      "Region": "cn-northwest-1",
      "UseFIPS": false,
      "UseDualStack": false
    }
  }
},
{
  "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-fips.cn-north-1.api.amazonwebservices.com.cn"
    }
  },
  "params": {
    "Region": "cn-north-1",

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        "UseFIPS": true,
        "UseDualStack": true
    }
},
{
    "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager-fips.cn-north-1.amazonaws.com.cn"
        }
    },
    "params": {
        "Region": "cn-north-1",
        "UseFIPS": true,
        "UseDualStack": false
    }
},
{
    "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager.cn-north-1.api.amazonwebservices.com.cn"
        }
    },
    "params": {
        "Region": "cn-north-1",
        "UseFIPS": false,
        "UseDualStack": true
    }
},
{
    "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager.us-gov-east-1.amazonaws.com"
        }
    },
    "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": false,
        "UseDualStack": false
    }
},
{
    "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
    "expect": {
        "endpoint": {

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        "url": "https://license-manager-fips.us-gov-east-1.amazonaws.com"
    }
},
"params": {
    "Region": "us-gov-east-1",
    "UseFIPS": true,
    "UseDualStack": false
}
},
{
    "documentation": "For region us-gov-west-1 with FIPS disabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager.us-gov-west-1.amazonaws.com"
        }
    },
    "params": {
        "Region": "us-gov-west-1",
        "UseFIPS": false,
        "UseDualStack": false
    }
},
{
    "documentation":
    "For region us-gov-west-1 with FIPS enabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager-fips.us-gov-west-1.amazonaws.com"
        }
    },
    "params": {
        "Region": "us-gov-west-1",
        "UseFIPS": true,
        "UseDualStack": false
    }
},
{
    "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager-fips.us-gov-east-1.api.aws"
        }
    },
},
"params": {
    "Region": "us-gov-east-1",
    "UseFIPS": true,
    "UseDualStack": true
}

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    }
  },
  {
    "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager.us-gov-east-1.api.aws"
      }
    },
    "params": {
      "Region": "us-gov-east-1",
      "UseFIPS": false,
      "UseDualStack": true
    }
  },
  {
    "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager.us-iso-east-1.c2s.ic.gov"
      }
    },
    "params": {
      "Region": "us-iso-east-1",
      "UseFIPS": false,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
    "expect": {
      "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
    },
    "params": {
      "Region": "us-iso-east-1",
      "UseFIPS": true,
      "UseDualStack": true
    }
  },
  {
    "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-fips.us-iso-east-1.c2s.ic.gov"
      }
    },
    "params": {

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    "Region": "us-iso-east-1",
    "UseFIPS": true,
    "UseDualStack": false
  }
},
{
  "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
  "expect": {
    "error": "DualStack is enabled
but this partition does not support DualStack"
  },
  "params": {
    "Region": "us-iso-east-1",
    "UseFIPS": false,
    "UseDualStack": true
  }
},
{
  "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.us-isob-east-1.sc2s.sgov.gov"
    }
  },
  "params": {
    "Region": "us-isob-east-1",
    "UseFIPS": false,
    "UseDualStack": false
  }
},
{
  "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
  "expect": {
    "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
  },
  "params": {
    "Region": "us-isob-east-1",
    "UseFIPS": true,
    "UseDualStack": true
  }
},
{
  "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-fips.us-isob-east-1.sc2s.sgov.gov"
    }
  }
}

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    },
    "params": {
      "Region": "us-isob-east-1",
      "UseFIPS": true,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
    "expect": {
      "error": "DualStack is enabled but this partition does not support DualStack"
    },
    "params": {
      "Region": "us-isob-east-1",
      "UseFIPS": false,
      "UseDualStack": true
    }
  },
  {
    "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
    "expect": {
      "endpoint": {
        "url": "https://example.com"
      }
    },
    "params": {
      "Region": "us-east-1",
      "UseFIPS": false,
      "UseDualStack": false,
      "Endpoint": "https://example.com"
    }
  },
  {
    "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
    "expect": {
      "endpoint": {
        "url": "https://example.com"
      }
    },
    "params": {
      "UseFIPS": false,
      "UseDualStack": false,
      "Endpoint": "https://example.com"
    }
  }
}

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    },
    {
      "documentation": "For custom endpoint with fips enabled and dualstack disabled",
      "expect": {
        "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
        "UseDualStack": false,
        "Endpoint": "https://example.com"
      }
    },
    {
      "documentation": "For custom endpoint with fips disabled and dualstack enabled",
      "expect": {
        "error":
"Invalid Configuration: Dualstack and custom endpoint are not supported"
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": true,
        "Endpoint": "https://example.com"
      }
    },
    {
      "documentation": "Missing region",
      "expect": {
        "error": "Invalid Configuration: Missing Region"
      }
    }
  ],
  "version": "1.0"
}
},
"com.amazonaws.licensemanager#AcceptGrant": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#AcceptGrantRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#AcceptGrantResponse"
  },
  "errors": [
    {

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        "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
        "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
    },
    {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
        "target": "com.amazonaws.licensemanager#ValidationException"
    }
}
],
"traits": {
    "smithy.api#documentation": "<p>Accepts the specified grant.</p>"
}
},
"com.amazonaws.licensemanager#AcceptGrantRequest": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#AcceptGrantResponse": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Grant

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ARN.</p>"
  }
},
"Status": {
  "target": "com.amazonaws.licensemanager#GrantStatus",
  "traits": {
    "smithy.api#documentation": "<p>Grant status.</p>"
  }
},
"Version": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Grant version.</p>"
  }
}
},
"traits": {
  "smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#AccessDeniedException": {
  "type": "structure",
  "members": {
    "Message": {
      "target": "com.amazonaws.licensemanager#Message"
    }
  },
  "traits": {
    "aws.protocols#awsQueryError": {
      "code": "ServiceAccessDenied",
      "httpResponseCode": 401
    },
    "smithy.api#documentation": "<p>Access to resource denied.</p>",
    "smithy.api#error": "client",
    "smithy.api#httpError": 401
  }
},
"com.amazonaws.licensemanager#ActivationOverrideBehavior": {
  "type": "enum",
  "members": {
    "DISTRIBUTED_GRANTS_ONLY": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "DISTRIBUTED_GRANTS_ONLY"
      }
    },
    "ALL_GRANTS_PERMITTED_BY_ISSUER": {

```

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        "target": "smithy.api#Unit",
        "traits": {
            "smithy.api#enumValue": "ALL_GRANTS_PERMITTED_BY_ISSUER"
        }
    }
},
"com.amazonaws.licensemanager#AllowedOperation": {
    "type": "enum",
    "members": {
        "CREATE_GRANT": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "CreateGrant"
            }
        },
        "CHECKOUT_LICENSE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "CheckoutLicense"
            }
        },
        "CHECKOUT_BORROW_LICENSE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "CheckoutBorrowLicense"
            }
        },
        "CHECK_IN_LICENSE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "CheckInLicense"
            }
        },
        "EXTEND_CONSUMPTION_LICENSE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "ExtendConsumptionLicense"
            }
        },
        "LIST_PURCHASED_LICENSES": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "ListPurchasedLicenses"
            }
        }
    }
}

```

```

    "CREATE_TOKEN": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "CreateToken"
      }
    }
  },
  "com.amazonaws.licensemanager#AllowedOperationList": {
    "type": "list",
    "member": {
      "target": "com.amazonaws.licensemanager#AllowedOperation"
    },
    "traits": {
      "smithy.api#length": {
        "min": 1,
        "max":
7
      }
    }
  },
  "com.amazonaws.licensemanager#Arn": {
    "type": "string",
    "traits": {
      "smithy.api#length": {
        "min": 0,
        "max": 2048
      },
      "smithy.api#pattern": "^arn:aws(-(cn|us-gov|iso-b|iso-c|iso-d)?:[A-Za-z0-9][A-Za-z0-9_/.-]{0,62}:[A-Za-
z0-9_/.-]{0,63}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9][A-Za-z0-9:/_+=,@.-]{0,1023}$"
    }
  },
  "com.amazonaws.licensemanager#ArnList": {
    "type": "list",
    "member": {
      "target": "com.amazonaws.licensemanager#Arn"
    }
  },
  "com.amazonaws.licensemanager#AuthorizationException": {
    "type": "structure",
    "members": {
      "Message": {
        "target": "com.amazonaws.licensemanager#Message"
      }
    },
    "traits": {
      "aws.protocols#awsQueryError":

```

```

{
    "code": "AuthorizationFailure",
    "httpResponseCode": 403
  },
  "smithy.api#documentation": "<p>The Amazon Web Services user account does not have permission to
perform the action. Check the IAM\n      policy associated with this account.</p>",
  "smithy.api#error": "client",
  "smithy.api#httpError": 403
}
},
"com.amazonaws.licensemanager#AutomatedDiscoveryInformation": {
  "type": "structure",
  "members": {
    "LastRunTime": {
      "target": "com.amazonaws.licensemanager#DateTime",
      "traits": {
        "smithy.api#documentation": "<p>Time that automated discovery last ran.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Describes automated discovery.</p>"
  }
},
"com.amazonaws.licensemanager#Boolean": {
  "type": "boolean",
  "traits": {
    "smithy.api#default": false
  }
},
"com.amazonaws.licensemanager#BorrowConfiguration": {
  "type": "structure",
  "members": {
    "AllowEarlyCheckIn": {
      "target": "com.amazonaws.licensemanager#BoxBoolean",
      "traits": {
        "smithy.api#documentation": "<p>Indicates whether early check-ins are allowed.</p>",
        "smithy.api#required": {}
      }
    }
  },
  "MaxTimeToLiveInMinutes": {
    "target": "com.amazonaws.licensemanager#BoxInteger",
    "traits": {
      "smithy.api#documentation": "<p>Maximum time for the borrow configuration, in minutes.</p>",
      "smithy.api#required": {}
    }
  }
}
}

```

```

},
  "traits": {
    "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
  }
},
"com.amazonaws.licensemanager#BoxBoolean": {
  "type": "boolean"
},
"com.amazonaws.licensemanager#BoxInteger": {
  "type": "integer"
},
"com.amazonaws.licensemanager#BoxLong": {
  "type": "long"
},
"com.amazonaws.licensemanager#CheckInLicense": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#CheckInLicenseRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#CheckInLicenseResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    }
  ],
  {
    "target": "com.amazonaws.licensemanager#ConflictException"
  },
  {
    "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
  },
  {
    "target": "com.amazonaws.licensemanager#RateLimitExceededException"
  },
  {
    "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
  },
  {
    "target": "com.amazonaws.licensemanager#ServerInternalException"
  },
  {
    "target": "com.amazonaws.licensemanager#ValidationException"
  }
}

```

```

    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Checks in the specified license. Check in a license when it is no longer
in use.</p>"
  }
},
"com.amazonaws.licensemanager#CheckInLicenseRequest":
{
  "type": "structure",
  "members": {
    "LicenseConsumptionToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>License consumption token.</p>",
        "smithy.api#required": {}
      }
    },
    "Beneficiary": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>License beneficiary.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#CheckInLicenseResponse": {
  "type": "structure",
  "members": {},
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#CheckoutBorrowLicense":
{
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    }
  ]
}

```

```

    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#EntitlementNotAllowedException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
    },
    {
      "target":
"com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#RedirectException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Checks out the specified license for offline use.</p>"
  }
},
"com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest": {
  "type": "structure",
  "members":
{
  "LicenseArn": {
    "target": "com.amazonaws.licensemanager#Arn",
    "traits": {
      "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license. The license must
use the borrow consumption configuration.</p>",
      "smithy.api#required": {}
    }
  }
}

```

```

    },
    "Entitlements": {
      "target": "com.amazonaws.licensemanager#EntitlementDataList",
      "traits": {
        "smithy.api#documentation": "<p>License entitlements. Partial checkouts are not supported.</p>",
        "smithy.api#required": {}
      }
    },
    "DigitalSignatureMethod": {
      "target": "com.amazonaws.licensemanager#DigitalSignatureMethod",
      "traits": {
        "smithy.api#documentation": "<p>Digital signature method. The possible value is JSON Web Signature (JWS) algorithm PS384.<br>For more information, see <a href=\"https://tools.ietf.org/html/rfc7518#section-3.5\">RFC 7518 Digital Signature with RSASSA-PSS</a>.</p>",
        "smithy.api#required": {}
      }
    },
    "NodeId": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Node ID.</p>"
      }
    },
    "CheckoutMetadata": {
      "target": "com.amazonaws.licensemanager#MetadataList",
      "traits": {
        "smithy.api#documentation": "<p>Information about constraints.</p>"
      }
    },
    "ClientToken": {
      "target": "com.amazonaws.licensemanager#ClientToken",
      "traits": {
        "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
        "smithy.api#required": {}
      }
    },
    "traits": {
      "smithy.api#input": {}
    }
  },
  "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse": {
    "type": "structure",
    "members": {
      "LicenseArn": {
        "target": "com.amazonaws.licensemanager#Arn",
        "traits": {

```



```

    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
  }
},
"LicenseConsumptionToken": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>License consumption token.</p>"
  }
},
"EntitlementsAllowed":
{
  "target": "com.amazonaws.licensemanager#EntitlementDataList",
  "traits": {
    "smithy.api#documentation": "<p>Allowed license entitlements.</p>"
  }
},
"NodeId": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Node ID.</p>"
  }
},
"SignedToken": {
  "target": "com.amazonaws.licensemanager#SignedToken",
  "traits": {
    "smithy.api#documentation": "<p>Signed token.</p>"
  }
},
"IssuedAt": {
  "target": "com.amazonaws.licensemanager#ISO8601DateTime",
  "traits": {
    "smithy.api#documentation": "<p>Date and time at which the license checkout
is issued.</p>"
  }
},
"Expiration": {
  "target": "com.amazonaws.licensemanager#ISO8601DateTime",
  "traits": {
    "smithy.api#documentation": "<p>Date and time at which the license checkout expires.</p>"
  }
},
"CheckoutMetadata": {
  "target": "com.amazonaws.licensemanager#MetadataList",
  "traits": {
    "smithy.api#documentation": "<p>Information about constraints.</p>"
  }
}
},

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```

    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#CheckoutLicense": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#CheckoutLicenseRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#CheckoutLicenseResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#RedirectException"
      },
      {
        "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
      },
      {
        "target":
"com.amazonaws.licensemanager#ServerInternalException"
      },
      {
        "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
      },
      {
        "target": "com.amazonaws.licensemanager#ValidationException"
      }
    ]
  },
  "traits": {
    "smithy.api#documentation": "<p>Checks out the specified license.</p>\n    <note>\n    <p>If the
account that created the license is the same that is performing the check out, you must\n    specify the account

```

```

as the beneficiary.</p>\n    </note>"
    }
  },
  "com.amazonaws.licensemanager#CheckoutLicenseRequest": {
    "type": "structure",
    "members": {
      "ProductSKU": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Product
SKU.</p>",
          "smithy.api#required": {}
        }
      },
      "CheckoutType": {
        "target": "com.amazonaws.licensemanager#CheckoutType",
        "traits": {
          "smithy.api#documentation": "<p>Checkout type.</p>",
          "smithy.api#required": {}
        }
      },
      "KeyFingerprint": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Key fingerprint identifying the license.</p>",
          "smithy.api#required": {}
        }
      },
      "Entitlements": {
        "target": "com.amazonaws.licensemanager#EntitlementDataList",
        "traits": {
          "smithy.api#documentation": "<p>License entitlements.</p>",
          "smithy.api#required": {}
        }
      },
      "ClientToken": {
        "target": "com.amazonaws.licensemanager#ClientToken",
        "traits": {
          "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",
          "smithy.api#required": {}
        }
      },
      "Beneficiary": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>License beneficiary.</p>"
        }
      }
    }
  }
}

```

```

    }
  },
  "NodeId": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Node ID.</p>"
    }
  }
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CheckoutLicenseResponse": {
  "type": "structure",
  "members": {
    "CheckoutType": {
      "target": "com.amazonaws.licensemanager#CheckoutType",
      "traits": {
        "smithy.api#documentation": "<p>Checkout type.</p>"
      }
    },
    "LicenseConsumptionToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>License consumption token.</p>"
      }
    },
    "EntitlementsAllowed": {
      "target": "com.amazonaws.licensemanager#EntitlementDataList",
      "traits": {
        "smithy.api#documentation": "<p>Allowed license entitlements.</p>"
      }
    },
    "SignedToken": {
      "target": "com.amazonaws.licensemanager#SignedToken",
      "traits": {
        "smithy.api#documentation": "<p>Signed token.</p>"
      }
    },
    "NodeId": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Node ID.</p>"
      }
    },
    "IssuedAt": {

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```

    "target": "com.amazonaws.licensemanager#ISO8601DateTime",
    "traits": {
      "smithy.api#documentation": "<p>Date and time at which the license checkout is issued.</p>"
    }
  },
  "Expiration": {
    "target": "com.amazonaws.licensemanager#ISO8601DateTime",
    "traits": {
      "smithy.api#documentation": "<p>Date and
time at which the license checkout expires.</p>"
    }
  },
  "LicenseArn": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the checkout license.</p>"
    }
  },
  "traits": {
    "smithy.api#output": {}
  },
  "com.amazonaws.licensemanager#CheckoutType": {
    "type": "enum",
    "members": {
      "PROVISIONAL": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "PROVISIONAL"
        }
      },
      "PERPETUAL": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "PERPETUAL"
        }
      }
    }
  },
  "com.amazonaws.licensemanager#ClientRequestToken": {
    "type": "string",
    "traits": {
      "smithy.api#length": {
        "min": 1,
        "max": 36
      }
    }
  }
}

```

```

    },
    "com.amazonaws.licensemanager#ClientToken": {
      "type": "string",
      "traits": {
        "smithy.api#length": {
          "min": 0,
          "max": 2048
        },
        "smithy.api#pattern": "^\\S+$"
      }
    },
    "com.amazonaws.licensemanager#ConflictException": {
      "type": "structure",
      "members": {
        "Message": {
          "target": "com.amazonaws.licensemanager#Message"
        }
      },
      "traits": {
        "aws.protocols#awsQueryError": {
          "code": "ConflictException",
          "httpResponseCode":
409
        },
        "smithy.api#documentation": "<p>There was a conflict processing the request. Try your request
again.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 409
      }
    },
    "com.amazonaws.licensemanager#ConsumedLicenseSummary": {
      "type": "structure",
      "members": {
        "ResourceType": {
          "target": "com.amazonaws.licensemanager#ResourceType",
          "traits": {
            "smithy.api#documentation": "<p>Resource type of the resource consuming a license.</p>"
          }
        },
        "ConsumedLicenses": {
          "target": "com.amazonaws.licensemanager#BoxLong",
          "traits": {
            "smithy.api#documentation": "<p>Number of licenses consumed by the resource.</p>"
          }
        }
      }
    },
  },

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```

"traits": {
  "smithy.api#documentation": "<p>Details about license consumption.</p>"
}
},
"com.amazonaws.licensemanager#ConsumedLicenseSummaryList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#ConsumedLicenseSummary"
  }
},
"com.amazonaws.licensemanager#ConsumptionConfiguration": {
  "type": "structure",
  "members": {
    "RenewType": {
      "target": "com.amazonaws.licensemanager#RenewType",
      "traits": {
        "smithy.api#documentation": "<p>Renewal frequency.</p>"
      }
    },
    "ProvisionalConfiguration": {
      "target": "com.amazonaws.licensemanager#ProvisionalConfiguration",
      "traits": {
        "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
      }
    },
    "BorrowConfiguration": {
      "target": "com.amazonaws.licensemanager#BorrowConfiguration",
      "traits": {
        "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Details about a consumption configuration.</p>"
  }
},
"com.amazonaws.licensemanager#CreateGrant": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#CreateGrantRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#CreateGrantResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    }
  ],

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```

    {
      "target":
"com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Creates a grant for the specified license. A grant shares the use of
license\n entitlements with a specific Amazon Web Services account, an organization, or an\n
organizational unit (OU). For more
information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-
licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
  }
},
"com.amazonaws.licensemanager#CreateGrantRequest": {
  "type": "structure",
  "members": {
    "ClientToken": {
      "target": "com.amazonaws.licensemanager#ClientToken",
      "traits": {
        "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",
        "smithy.api#required": {}
      }
    },
    "GrantName": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Grant name.</p>",
        "smithy.api#required": {}
      }
    }
  }
},
"LicenseArn": {

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```

    "target": "com.amazonaws.licensemanager#Arn",
    "traits": {
      "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
      "smithy.api#required": {}
    }
  },
  "Principals": {
    "target": "com.amazonaws.licensemanager#PrincipalArnList",
    "traits": {
      "smithy.api#documentation": "<p>The grant principals. You can specify one of the following as an Amazon Resource Name (ARN):</p>\n  <ul>\n    <li>\n      <p>An Amazon Web Services account, which includes only the account specified.</p>\n    </li>\n    <ul>\n      <li>\n        <p>An organizational unit (OU), which includes all accounts in the OU.</p>\n      </li>\n    </ul>\n    <li>\n      <p>An organization, which will include all accounts across your organization.</p>\n    </li>\n  </ul>",
      "smithy.api#required": {}
    }
  },
  "HomeRegion": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Home Region of the grant.</p>",
      "smithy.api#required": {}
    }
  },
  "AllowedOperations": {
    "target": "com.amazonaws.licensemanager#AllowedOperationList",
    "traits": {
      "smithy.api#documentation": "<p>Allowed operations for the grant.</p>",
      "smithy.api#required": {}
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},

"com.amazonaws.licensemanager#CreateGrantResponse": {
  "type": "structure",
  "members": {
    "GrantArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>Grant ARN.</p>"
      }
    }
  },
}

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```

    "Status": {
      "target": "com.amazonaws.licensemanager#GrantStatus",
      "traits": {
        "smithy.api#documentation": "<p>Grant status.</p>"
      }
    },
    "Version": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Grant version.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#CreateGrantVersion":
{
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#CreateGrantVersionRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#CreateGrantVersionResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ]
}

```

```

    ],
    "traits": {
      "smithy.api#documentation": "<p>Creates a new version of the specified grant. For more information, see 

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    }
  },
  "SourceVersion": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Current version of the grant.</p>"
    }
  },
  "Options": {
    "target": "com.amazonaws.licensemanager#Options",
    "traits": {
      "smithy.api#documentation": "<p>The options specified for the grant.</p>"
    }
  }
},
"traits": {
  "smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateGrantVersionResponse": {
  "type": "structure",
  "members": {
    "GrantArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>Grant ARN.</p>"
      }
    },
    "Status": {
      "target": "com.amazonaws.licensemanager#GrantStatus",
      "traits": {
        "smithy.api#documentation": "<p>Grant status.</p>"
      }
    },
    "Version": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>New version of the grant.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#CreateLicense": {
  "type": "operation",

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"input": {
  "target": "com.amazonaws.licensemanager#CreateLicenseRequest"
},
"output": {
  "target": "com.amazonaws.licensemanager#CreateLicenseResponse"
},
"errors": [
  {
    "target": "com.amazonaws.licensemanager#AccessDeniedException"
  },
  {
    "target": "com.amazonaws.licensemanager#AuthorizationException"
  },
  {
    "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
  },
  {
    "target": "com.amazonaws.licensemanager#RateLimitExceededException"
  },
  {
    "target": "com.amazonaws.licensemanager#RedirectException"
  },
  {
    "target": "com.amazonaws.licensemanager#ServerInternalException"
  },
  {
    "target": "com.amazonaws.licensemanager#ValidationException"
  }
],
"traits": {
  "smithy.api#documentation": "<p>Creates a license.</p>"
}
},
"com.amazonaws.licensemanager#CreateLicenseConfiguration": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    }
  ]
}

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    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Creates a license configuration.</p>\n    <p>A license configuration is an abstraction of a customer license agreement that can be\n    consumed and enforced by License Manager. Components include specifications for the license\n    type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n    Dedicated Instance, Dedicated Host, or all of these), license affinity to host (how long a \n    license must be associated with a host), and the number of licenses purchased and used.</p>"
  }
},
"com.amazonaws.licensemanager#CreateLicenseConfigurationRequest": {
  "type": "structure",
  "members": {
    "Name": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Name of the license configuration.</p>",
        "smithy.api#required": {}
      }
    },
    "Description": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Description of the license configuration.</p>"
      }
    }
  },
  "LicenseCountingType": {
    "target": "com.amazonaws.licensemanager#LicenseCountingType",
    "traits": {
      "smithy.api#documentation": "<p>Dimension used to track the license inventory.</p>",
      "smithy.api#required": {}
    }
  },
  "LicenseCount": {
    "target": "com.amazonaws.licensemanager#BoxLong",

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    "traits": {
      "smithy.api#documentation": "<p>Number of licenses managed by the license configuration.</p>"
    }
  },
  "LicenseCountHardLimit": {
    "target": "com.amazonaws.licensemanager#BoxBoolean",
    "traits": {
      "smithy.api#documentation": "<p>Indicates whether hard or soft license enforcement is used. Exceeding a hard limit\n      blocks the launch of new instances.</p>"
    }
  },
  "LicenseRules": {
    "target":
      "com.amazonaws.licensemanager#StringList",
    "traits": {
      "smithy.api#documentation": "<p>License rules. The syntax is #name=value (for example, #allowedTenancy=EC2-DedicatedHost). The available rules \n      vary by dimension, as follows.</p>\n      <ul>\n        <li>\n          <p>\n            <code>Cores</code> dimension: <code>allowedTenancy</code> |\n              <code>licenseAffinityToHost</code> |\n              <code>maximumCores</code> |\n              <code>minimumCores</code>\n            </p>\n          </li>\n          <li>\n            <p>\n              <code>Instances</code> dimension: <code>allowedTenancy</code> |\n                <code>maximumCores</code> |\n                <code>minimumCores</code> |\n                <code>maximumSockets</code> | <code>minimumSockets</code> |\n                <code>maximumVcpus</code> | <code>minimumVcpus</code>\n            </p>\n          </li>\n          <li>\n            <p>\n              <code>Sockets</code> dimension: <code>allowedTenancy</code> |\n                <code>licenseAffinityToHost</code> |\n                <code>maximumSockets</code> |\n                <code>minimumSockets</code>\n            </p>\n          </li>\n          <li>\n            <p>\n              <code>vCPUs</code> dimension: <code>allowedTenancy</code> |\n                <code>honorVcpuOptimization</code> |\n                <code>maximumVcpus</code> |\n                <code>minimumVcpus</code>\n            </p>\n          </li>\n        </ul>\n      <p>The unit for <code>licenseAffinityToHost</code> is days and the range is 1 to 180. The possible \n      values for <code>allowedTenancy</code> are <code>EC2-Default</code>, <code>EC2-DedicatedHost</code>, and \n      <code>EC2-DedicatedInstance</code>. The possible values for <code>honorVcpuOptimization</code> are \n      <code>True</code> and <code>False</code>.</p>"
    }
  },
  "Tags": {
    "target": "com.amazonaws.licensemanager#TagList",
    "traits": {
      "smithy.api#documentation": "<p>Tags to add to the license configuration.</p>"
    }
  },
  "DisassociateWhenNotFound": {
    "target": "com.amazonaws.licensemanager#BoxBoolean",
    "traits": {
      "smithy.api#documentation": "<p>When true, disassociates a resource when software is\n      uninstalled.</p>"
    }
  }
}

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    }
  },
  "ProductInformationList": {
    "target": "com.amazonaws.licensemanager#ProductInformationList",
    "traits": {
      "smithy.api#documentation": "<p>Product information.</p>"
    }
  }
},
"traits": {
  "smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseConfigurationResponse":
{
  "type": "structure",
  "members": {
    "LicenseConfigurationArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    }
  ]
}

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    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Creates a new license conversion task.</p>"
  }
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest": {
  "type": "structure",
  "members": {
    "ResourceArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource you are converting the license type for.</p>",
        "smithy.api#required": {}
      }
    },
    "SourceLicenseContext": {
      "target": "com.amazonaws.licensemanager#LicenseConversionContext",
      "traits": {
        "smithy.api#documentation": "<p>Information that identifies the license type you are converting from. \n\n    For the structure of the source license, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/conversion-procedures.html#conversion-cli\">Convert a license type using the CLI </a> in the <i>License Manager User Guide</i>.</p>",
        "smithy.api#required": {}
      }
    },
    "DestinationLicenseContext": {
      "target": "com.amazonaws.licensemanager#LicenseConversionContext",
      "traits": {
        "smithy.api#documentation": "<p>Information that identifies the license type you are converting to. For the structure of the destination license, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/conversion-procedures.html#conversion-cli\">Convert a license type using the CLI </a> in the <i>License Manager User Guide</i>.</p>",
        "smithy.api#required": {}
      }
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
}

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    }
  },
  "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse": {
    "type": "structure",
    "members": {
      "LicenseConversionTaskId": {
        "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",

        "traits": {
          "smithy.api#documentation": "<p>The ID of the created license type conversion task.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
      },
      {

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        "target": "com.amazonaws.licensemanager#ValidationException"
    }
],
"traits": {
    "smithy.api#documentation": "<p>Creates a report generator.</p>"
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest": {
    "type": "structure",
    "members": {
        "ReportGeneratorName":
    {
        "target": "com.amazonaws.licensemanager#ReportGeneratorName",
        "traits": {
            "smithy.api#documentation": "<p>Name of the report generator.</p>",
            "smithy.api#required": {}
        }
    },
    "Type": {
        "target": "com.amazonaws.licensemanager#ReportTypeList",
        "traits": {
            "smithy.api#documentation": "<p>Type of reports to generate. The following report types an be
generated:</p>\n    <ul>\n        <li>\n            <p>License configuration report - Reports the number and
details of consumed licenses for a license configuration.</p>\n        </li>\n        <li>\n            <p>Resource
report - Reports the tracked licenses and resource consumption for a license configuration.</p>\n        </li>\n
</ul>",
            "smithy.api#required": {}
        }
    }
},
    "ReportContext": {
        "target": "com.amazonaws.licensemanager#ReportContext",
        "traits": {
            "smithy.api#documentation": "<p>Defines the type of license configuration the report generator
tracks.</p>",
            "smithy.api#required": {}
        }
    },
    "ReportFrequency": {
        "target": "com.amazonaws.licensemanager#ReportFrequency",
        "traits": {
            "smithy.api#documentation": "<p>Frequency by which reports are generated. Reports can be
generated daily, monthly, or weekly.</p>",
            "smithy.api#required": {}
        }
    },
    "ClientToken": {
        "target": "com.amazonaws.licensemanager#ClientRequestToken",

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    "traits": {
      "smithy.api#documentation": "<p>Unique,
case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
      "smithy.api#required": {}
    }
  },
  "Description": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Description of the report generator.</p>"
    }
  },
  "Tags": {
    "target": "com.amazonaws.licensemanager#TagList",
    "traits": {
      "smithy.api#documentation": "<p>Tags to add to the report generator.</p>"
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse": {
  "type": "structure",
  "members": {
    "LicenseManagerReportGeneratorArn":
    {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the new report
generator.</p>"
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#CreateLicenseRequest": {
    "type": "structure",
    "members": {
      "LicenseName": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>License name.</p>",
          "smithy.api#required": {}
        }
      }
    }
  }
}

```

```

    },
    "ProductName": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Product
name.</p>",
        "smithy.api#required": {}
      }
    },
    "ProductSKU": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Product SKU.</p>",
        "smithy.api#required": {}
      }
    },
    "Issuer": {
      "target": "com.amazonaws.licensemanager#Issuer",
      "traits": {
        "smithy.api#documentation": "<p>License issuer.</p>",
        "smithy.api#required": {}
      }
    },
    "HomeRegion": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Home Region for the license.</p>",
        "smithy.api#required": {}
      }
    }
  },
  "Validity": {
    "target": "com.amazonaws.licensemanager#DatetimeRange",
    "traits": {
      "smithy.api#documentation": "<p>Date and time range during which the license is valid, in ISO8601-
UTC format.</p>",
      "smithy.api#required": {}
    }
  },
  "Entitlements": {
    "target": "com.amazonaws.licensemanager#EntitlementList",
    "traits": {
      "smithy.api#documentation": "<p>License entitlements.</p>",
      "smithy.api#required": {}
    }
  },
  "Beneficiary": {
    "target": "com.amazonaws.licensemanager#String",

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    "traits": {
      "smithy.api#documentation": "<p>License beneficiary.</p>",
      "smithy.api#required": {}
    }
  },
  "ConsumptionConfiguration": {
    "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
    "traits": {
      "smithy.api#documentation": "<p>Configuration for consumption of the license. Choose a provisional configuration for workloads\n      running with continuous connectivity. Choose a borrow configuration for workloads with offline\n      usage.</p>",
      "smithy.api#required": {}
    }
  },
  "LicenseMetadata": {
    "target": "com.amazonaws.licensemanager#MetadataList",
    "traits": {
      "smithy.api#documentation": "<p>Information about the license.</p>"
    }
  },
  "ClientToken": {
    "target": "com.amazonaws.licensemanager#ClientToken",
    "traits": {
      "smithy.api#documentation":
"<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
      "smithy.api#required": {}
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#CreateLicenseResponse": {
  "type": "structure",
  "members": {
    "LicenseArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
      }
    },
    "Status": {
      "target": "com.amazonaws.licensemanager#LicenseStatus",
      "traits": {
        "smithy.api#documentation": "<p>License status.</p>"
      }
    }
  },
}

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```

"Version": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>License version.</p>"
  }
},
"traits": {
  "smithy.api#output": {}
},
"com.amazonaws.licensemanager#CreateLicenseVersion": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#CreateLicenseVersionRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#CreateLicenseVersionResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#ConflictException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#RedirectException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Creates a new version of the specified license.</p>"
  }
}

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    },
    "com.amazonaws.licensemanager#CreateLicenseVersionRequest": {
      "type": "structure",
      "members": {
        "LicenseArn": {
          "target":
"com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
            "smithy.api#required": {}
          }
        },
        "LicenseName": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>License name.</p>",
            "smithy.api#required": {}
          }
        },
        "ProductName": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Product name.</p>",
            "smithy.api#required": {}
          }
        },
        "Issuer": {
          "target": "com.amazonaws.licensemanager#Issuer",
          "traits": {
            "smithy.api#documentation": "<p>License issuer.</p>",
            "smithy.api#required": {}
          }
        },
        "HomeRegion": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Home Region of the license.</p>",
            "smithy.api#required": {}
          }
        },
        "Validity": {
          "target": "com.amazonaws.licensemanager#DatetimeRange",
          "traits": {
            "smithy.api#documentation": "<p>Date and time range during which the license is valid, in ISO8601-
UTC format.</p>",
            "smithy.api#required": {}
          }
        }
      }
    }
  }

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    },
    "LicenseMetadata": {
      "target": "com.amazonaws.licensemanager#MetadataList",
      "traits": {
        "smithy.api#documentation": "<p>Information about the license.</p>"
      }
    },
    "Entitlements": {
      "target": "com.amazonaws.licensemanager#EntitlementList",
      "traits": {
        "smithy.api#documentation": "<p>License entitlements.</p>",
        "smithy.api#required": {}
      }
    },
    "ConsumptionConfiguration": {
      "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
      "traits": {
        "smithy.api#documentation": "<p>Configuration for consumption of the license. Choose a provisional
configuration for workloads\n    running with continuous connectivity. Choose a borrow configuration for
workloads with offline\n    usage.</p>",
        "smithy.api#required": {}
      }
    },
    "Status": {
      "target": "com.amazonaws.licensemanager#LicenseStatus",
      "traits": {
        "smithy.api#documentation": "<p>License status.</p>",
        "smithy.api#required": {}
      }
    },
    "ClientToken": {
      "target": "com.amazonaws.licensemanager#ClientToken",
      "traits": {
        "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",
        "smithy.api#required": {}
      }
    },
    "SourceVersion": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Current version of the license.</p>"
      }
    }
  },
  "traits": {

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"smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#CreateLicenseVersionResponse": {
  "type": "structure",
  "members": {
    "LicenseArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>License ARN.</p>"
      }
    },
    "Version": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>New version of the license.</p>"
      }
    },
    "Status": {
      "target": "com.amazonaws.licensemanager#LicenseStatus",
      "traits": {
        "smithy.api#documentation": "<p>License status.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#CreateToken": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#CreateTokenRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#CreateTokenResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    }
  ],

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    {
      "target": "com.amazonaws.licensemanager#RedirectException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Creates a long-lived token.</p>\n    <p>A refresh token is a JWT token used to get an access token. With an access token,\n    you can call AssumeRoleWithWebIdentity to get role credentials that you can use to \n    call License Manager to manage the specified license.</p>"
  },
  "com.amazonaws.licensemanager#CreateTokenRequest": {
    "type": "structure",
    "members": {
      "LicenseArn": {
        "target": "com.amazonaws.licensemanager#Arn",
        "traits": {
          {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license. The ARN is mapped to the aud claim of the\n            JWT token.</p>",
            "smithy.api#required": {}
          }
        },
        "RoleArns": {
          "target": "com.amazonaws.licensemanager#ArnList",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the IAM roles to embed in the token. \n            License Manager does not check whether the roles are in use.</p>"
          }
        },
        "ExpirationInDays": {
          "target": "com.amazonaws.licensemanager#Integer",
          "traits": {
            "smithy.api#documentation": "<p>Token expiration, in days, counted from token creation. The default is 365 days.</p>"
          }
        }
      }
    }
  }
}

```

```

    },
    "TokenProperties": {
      "target": "com.amazonaws.licensemanager#MaxSize3StringList",
      "traits": {
        "smithy.api#documentation": "<p>Data specified by the caller to be included in the JWT token. The
data is mapped\n      to the amr claim of the JWT token.</p>"
      }
    },
    "ClientToken": {
      "target": "com.amazonaws.licensemanager#ClientToken",
      "traits": {
        "smithy.api#documentation": "<p>Idempotency token, valid for 10 minutes.</p>",
        "smithy.api#required": {}
      }
    },
    "traits": {
      "smithy.api#input": {}
    },
    "com.amazonaws.licensemanager#CreateTokenResponse": {
      "type": "structure",
      "members": {
        "TokenId": {
          "target": "com.amazonaws.licensemanager#String",

          "traits": {
            "smithy.api#documentation": "<p>Token ID.</p>"
          }
        },
        "TokenType": {
          "target": "com.amazonaws.licensemanager#TokenType",
          "traits": {
            "smithy.api#documentation": "<p>Token type.</p>"
          }
        },
        "Token": {
          "target": "com.amazonaws.licensemanager#TokenString",
          "traits": {
            "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#DateTime": {

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```

    "type": "timestamp"
  },
  "com.amazonaws.licensemanager#DatetimeRange": {
    "type": "structure",
    "members": {
      "Begin": {
        "target": "com.amazonaws.licensemanager#ISO8601DateTime",
        "traits": {
          "smithy.api#documentation": "<p>Start of the time range.</p>",
          "smithy.api#required": {}
        }
      },
      "End": {
        "target": "com.amazonaws.licensemanager#ISO8601DateTime",
        "traits": {
          "smithy.api#documentation": "<p>End of the time range.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#documentation": "<p>Describes a time range, in ISO8601-UTC format.</p>"
    }
  },
  "com.amazonaws.licensemanager#DeleteGrant": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#DeleteGrantRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#DeleteGrantResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
      },
      {

```

```

        "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
        "target": "com.amazonaws.licensemanager#ValidationException"
    }
],
"traits": {
    "smithy.api#documentation": "<p>Deletes
the specified grant.</p>"
}
},
"com.amazonaws.licensemanager#DeleteGrantRequest": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                "smithy.api#required": {}
            }
        },
        "StatusReason": {
            "target": "com.amazonaws.licensemanager#StatusReasonMessage",
            "traits": {
                "smithy.api#documentation": "<p>The Status reason for the delete request.</p>"
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Current version of the
grant.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#DeleteGrantResponse": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
        }
    }
}

```

```

    },
    "Status": {
      "target": "com.amazonaws.licensemanager#GrantStatus",
      "traits": {
        "smithy.api#documentation": "<p>Grant status.</p>"
      }
    },
    "Version": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation":
"<p>Grant version.</p>"
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#DeleteLicense": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#DeleteLicenseRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#DeleteLicenseResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#ConflictException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      }
    ]
  },
  {
    "target": "com.amazonaws.licensemanager#RateLimitExceededException"
  },
  {
    "target": "com.amazonaws.licensemanager#RedirectException"
  },
  {

```

```

        "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
        "target": "com.amazonaws.licensemanager#ValidationException"
    }
],
"traits": {
    "smithy.api#documentation": "<p>Deletes the specified license.</p>"
}
},
"com.amazonaws.licensemanager#DeleteLicenseConfiguration": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse"
    },
}

"errors": [
    {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
    }
],
"traits": {
    "smithy.api#documentation": "<p>Deletes the specified license configuration.</p>\n    <p>You cannot delete a license configuration that is in use.</p>"
}
},
"com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest": {
    "type": "structure",
    "members":
{
    "LicenseConfigurationArn": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {

```



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        "smithy.api#documentation": "<p>ID of the license configuration.</p>",
        "smithy.api#required": {}
    }
}
},
"traits": {
    "smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse": {
    "type": "structure",
    "members": {},
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ]
}

```

```

    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Deletes the specified report generator.</p>\n    <p>This action
deletes the report generator, which stops it from generating future reports.\n    The action cannot be reversed. It
has no effect on the previous reports from this generator.</p>"
  }
},
"com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest": {
  "type": "structure",
  "members": {
    "LicenseManagerReportGeneratorArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator to be
deleted.</p>",
        "smithy.api#required": {}
      }
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse": {
  "type": "structure",
  "members": {},
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#DeleteLicenseRequest": {
  "type": "structure",
  "members": {
    "LicenseArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
        "smithy.api#required": {}
      }
    }
  },
  "SourceVersion": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Current version of the license.</p>",
      "smithy.api#required": {}
    }
  }
}

```

```

{}
  }
}
},
"traits": {
  "smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteLicenseResponse": {
  "type": "structure",
  "members": {
    "Status": {
      "target": "com.amazonaws.licensemanager#LicenseDeletionStatus",
      "traits": {
        "smithy.api#documentation": "<p>License status.</p>"
      }
    },
    "DeletionDate": {
      "target": "com.amazonaws.licensemanager#ISO8601DateTime",
      "traits": {
        "smithy.api#documentation": "<p>Date when the license is deleted.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#DeleteToken": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#DeleteTokenRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#DeleteTokenResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#RedirectException"
    }
  ]
}

```

```

    },
    {
      "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
  ],
  {
    "target": "com.amazonaws.licensemanager#ValidationException"
  }
],
"traits": {
  "smithy.api#documentation": "<p>Deletes the specified token. Must be called in the license home
Region.</p>"
}
},
"com.amazonaws.licensemanager#DeleteTokenRequest": {
  "type": "structure",
  "members": {
    "TokenId": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Token ID.</p>",
        "smithy.api#required": {}
      }
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#DeleteTokenResponse": {
  "type": "structure",
  "members": {},
  "traits": {
    "smithy.api#output": {}
  }
}
},
"com.amazonaws.licensemanager#DigitalSignatureMethod": {
  "type": "enum",
  "members": {
    "JWT_PS384": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "JWT_PS384"
      }
    }
  }
}

```

```

    }
  }
},
"com.amazonaws.licensemanager#Entitlement": {
  "type": "structure",
  "members": {
    "Name": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Entitlement name.</p>",
        "smithy.api#required": {}
      }
    },
    "Value": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Entitlement resource. Use only
if the unit is None.</p>"
      }
    },
    "MaxCount": {
      "target": "com.amazonaws.licensemanager#Long",
      "traits": {
        "smithy.api#documentation": "<p>Maximum entitlement count. Use if the unit is not None.</p>"
      }
    },
    "Overage": {
      "target": "com.amazonaws.licensemanager#BoxBoolean",
      "traits": {
        "smithy.api#documentation": "<p>Indicates whether overages are allowed.</p>"
      }
    },
    "Unit": {
      "target": "com.amazonaws.licensemanager#EntitlementUnit",
      "traits": {
        "smithy.api#documentation": "<p>Entitlement unit.</p>",
        "smithy.api#required": {}
      }
    },
    "AllowCheckIn": {
      "target":
"com.amazonaws.licensemanager#BoxBoolean",
      "traits": {
        "smithy.api#documentation": "<p>Indicates whether check-ins are allowed.</p>"
      }
    }
  },
  "traits": {

```

```

    "smithy.api#documentation": "<p>Describes a resource entitled for use with a license.</p>"
  }
},
"com.amazonaws.licensemanager#EntitlementData": {
  "type": "structure",
  "members": {
    "Name": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Entitlement data name.</p>",
        "smithy.api#required": {}
      }
    }
  },
  "Value": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Entitlement
data value.</p>"
    }
  },
  "Unit": {
    "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
    "traits": {
      "smithy.api#documentation": "<p>Entitlement data unit.</p>",
      "smithy.api#required": {}
    }
  }
},
"traits": {
  "smithy.api#documentation": "<p>Data associated with an entitlement resource.</p>"
}
},
"com.amazonaws.licensemanager#EntitlementDataList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#EntitlementData"
  }
},
"com.amazonaws.licensemanager#EntitlementDataUnit": {
  "type": "enum",
  "members": {
    "COUNT": {
      "target": "smithy.api#Unit",
      "traits": {

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"smithy.api#enumValue": "Count"
  }
},

```

```

"NONE": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "None"
  }
},
"SECONDS": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Seconds"
  }
},
"MICROSECONDS": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Microseconds"
  }
},
"MILLISECONDS": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Milliseconds"
  }
},
"BYTES": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Bytes"
  }
},
"KILOBYTES": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Kilobytes"
  }
},
"MEGABYTES": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Megabytes"
  }
},
"GIGABYTES": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Gigabytes"
  }
},

```

```

"TERABYTES": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Terabytes"
  }
},
"BITS": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Bits"
  }
},
"KILOBITS": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Kilobits"
  }
},
"MEGABITS": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Megabits"
  }
},
"GIGABITS": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Gigabits"
  }
},
"TERABITS": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Terabits"
  }
}
},
"PERCENT": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Percent"
  }
},
"BYTES_PER_SECOND": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Bytes/Second"
  }
}

```



```

    }
  },
  "KILOBYTES_PER_SECOND": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Kilobytes/Second"
    }
  },
  "MEGABYTES_PER_SECOND": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Megabytes/Second"
    }
  },
  "GIGABYTES_PER_SECOND": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Gigabytes/Second"
    }
  },
  "TERABYTES_PER_SECOND": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Terabytes/Second"
    }
  },
  "BITS_PER_SECOND": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Bits/Second"
    }
  },
  "KILOBITS_PER_SECOND": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Kilobits/Second"
    }
  },
  "MEGABITS_PER_SECOND": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue":
"Megabits/Second"
    }
  },
  "GIGABITS_PER_SECOND": {
    "target": "smithy.api#Unit",
    "traits": {

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```

        "smithy.api#enumValue": "Gigabits/Second"
    }
},
"TERABITS_PER_SECOND": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Terabits/Second"
    }
},
"COUNT_PER_SECOND": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Count/Second"
    }
}
},
"com.amazonaws.licensemanager#EntitlementList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#Entitlement"
    }
},
"com.amazonaws.licensemanager#EntitlementNotAllowedException":
{
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>The entitlement is not allowed.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#EntitlementUnit": {
    "type": "enum",
    "members": {
        "COUNT": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Count"
            }
        },
        "NONE": {
            "target": "smithy.api#Unit",

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```

    "traits": {
      "smithy.api#enumValue": "None"
    }
  },
  "SECONDS": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Seconds"
    }
  },
  "MICROSECONDS": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Microseconds"
    }
  },
  "MILLISECONDS": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Milliseconds"
    }
  },
  "BYTES": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Bytes"
    }
  },
  "KILOBYTES": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Kilobytes"
    }
  },
  "MEGABYTES": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Megabytes"
    }
  },
  "GIGABYTES": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Gigabytes"
    }
  },
  "TERABYTES": {

```

```

    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Terabytes"
    }
  },
  "BITS": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Bits"
    }
  },
  "KILOBITS": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Kilobits"
    }
  },
  "MEGABITS": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Megabits"
    }
  },
  "GIGABITS": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Gigabits"
    }
  },
  "TERABITS": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Terabits"
    }
  },
  "PERCENT": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Percent"
    }
  },
  "BYTES_PER_SECOND": {
    "target":
"smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Bytes/Second"
    }
  }

```

```

    },
    "KILOBYTES_PER_SECOND": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Kilobytes/Second"
      }
    },
    "MEGABYTES_PER_SECOND": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Megabytes/Second"
      }
    },
    "GIGABYTES_PER_SECOND": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Gigabytes/Second"
      }
    },
    "TERABYTES_PER_SECOND": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Terabytes/Second"
      }
    },
    "BITS_PER_SECOND": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Bits/Second"
      }
    },
    "KILOBITS_PER_SECOND": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Kilobits/Second"
      }
    },
    "MEGABITS_PER_SECOND": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Megabits/Second"
      }
    },
    "GIGABITS_PER_SECOND": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Gigabits/Second"
      }
    }
  }

```

```

    }
  },
  "TERABITS_PER_SECOND": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Terabits/Second"
    }
  },
  "COUNT_PER_SECOND": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Count/Second"
    }
  }
}
},
"com.amazonaws.licensemanager#EntitlementUsage": {
  "type": "structure",
  "members": {
    "Name": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Entitlement usage name.</p>",
        "smithy.api#required": {}
      }
    },
    "ConsumedValue": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Resource usage consumed.</p>",
        "smithy.api#required": {}
      }
    },
    "MaxCount": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Maximum entitlement usage count.</p>"
      }
    },
    "Unit": {
      "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
      "traits": {
        "smithy.api#documentation": "<p>Entitlement usage unit.</p>",
        "smithy.api#required": {}
      }
    }
  }
}

```

```

    },
    "traits": {
      "smithy.api#documentation": "<p>Usage associated with an entitlement resource.</p>"
    }
  },
  "com.amazonaws.licensemanager#EntitlementUsageList":
  {
    "type": "list",
    "member": {
      "target": "com.amazonaws.licensemanager#EntitlementUsage"
    }
  },
  "com.amazonaws.licensemanager#ExtendLicenseConsumption": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
      },
      {
        "target": "com.amazonaws.licensemanager#ValidationException"
      }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Extends the expiration date for license consumption.</p>"
    }
  },
  "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest": {

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"type": "structure",
"members": {
  "LicenseConsumptionToken": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>License consumption token.</p>",
      "smithy.api#required": {}
    }
  }
},
"DryRun": {
  "target": "com.amazonaws.licensemanager#Boolean",
  "traits": {
    "smithy.api#default": false,
    "smithy.api#documentation": "<p>Checks whether you have the required permissions for the action, without actually making the request. Provides an error response if you do not have the required permissions.</p>"
  }
},
"traits": {
  "smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse": {
  "type": "structure",
  "members": {
    "LicenseConsumptionToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>License consumption token.</p>"
      }
    }
  },
  "Expiration": {
    "target": "com.amazonaws.licensemanager#ISO8601DateTime",
    "traits": {
      "smithy.api#documentation": "<p>Date and time at which the license consumption expires.</p>"
    }
  }
},
"traits": {
  "smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#FailedDependencyException": {
  "type": "structure",
  "members": {
    "Message": {

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    "target": "com.amazonaws.licensemanager#Message"
  },
  "ErrorCode": {
    "target": "com.amazonaws.licensemanager#String"
  }
},
"traits": {
  "aws.protocols#awsQueryError": {
    "code": "FailedDependency",
    "httpResponseCode": 424
  },
  "smithy.api#documentation":
"<p>A dependency required to run the API is missing.</p>",
  "smithy.api#error": "client",
  "smithy.api#httpError": 424
}
},
"com.amazonaws.licensemanager#Filter": {
  "type": "structure",
  "members": {
    "Name": {
      "target": "com.amazonaws.licensemanager#FilterName",
      "traits": {
        "smithy.api#documentation": "<p>Name of the filter. Filter names are case-sensitive.</p>"
      }
    },
    "Values": {
      "target": "com.amazonaws.licensemanager#FilterValues",
      "traits": {
        "smithy.api#documentation": "<p>The value of the filter, which is case-sensitive. You can only
specify one value for the filter.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>A filter
name and value pair that is used to return more specific results from a\n    describe operation. Filters can be used
to match a set of resources by specific criteria,\n    such as tags, attributes, or IDs.</p>"
  }
},
"com.amazonaws.licensemanager#FilterLimitExceededException": {
  "type": "structure",
  "members": {
    "Message": {
      "target": "com.amazonaws.licensemanager#Message"
    }
  },
  "traits": {

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```

    "aws.protocols#awsQueryError": {
      "code": "FilterLimitExceeded",
      "httpResponseCode": 400
    },
    "smithy.api#documentation": "<p>The request uses too many filters or too many filter values.</p>",
    "smithy.api#error": "client",
    "smithy.api#httpError": 400
  }
},
"com.amazonaws.licensemanager#FilterList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#Filter"
  }
},
"com.amazonaws.licensemanager#FilterName": {
  "type": "string"
},
"com.amazonaws.licensemanager#FilterValue": {
  "type": "string"
},
"com.amazonaws.licensemanager#FilterValues": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#FilterValue",
    "traits": {
      "smithy.api#xmlName": "item"
    }
  }
},
"com.amazonaws.licensemanager#Filters": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#Filter",
    "traits": {
      "smithy.api#xmlName": "item"
    }
  }
},
"com.amazonaws.licensemanager#GetAccessToken": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#GetAccessTokenRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#GetAccessTokenResponse"
  },
  "errors": [

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    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Gets a temporary access token to use with
AssumeRoleWithWebIdentity. Access
tokens\n    are valid for one hour.</p>"
  }
},
"com.amazonaws.licensemanager#GetAccessTokenRequest": {
  "type": "structure",
  "members": {
    "Token": {
      "target": "com.amazonaws.licensemanager#TokenString",
      "traits": {
        "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>",
        "smithy.api#required": {}
      }
    },
    "TokenProperties": {
      "target": "com.amazonaws.licensemanager#MaxSize3StringList",
      "traits": {
        "smithy.api#documentation": "<p>Token properties to validate against those present in the JWT
token.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#GetAccessTokenResponse":
{
  "type": "structure",
  "members": {

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"AccessToken": {
  "target": "com.amazonaws.licensemanager#TokenString",
  "traits": {
    "smithy.api#documentation": "<p>Temporary access token.</p>"
  }
},
"traits": {
  "smithy.api#output": {}
},
"com.amazonaws.licensemanager#GetGrant": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#GetGrantRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#GetGrantResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Gets detailed information about the specified grant.</p>"
  }
},
"com.amazonaws.licensemanager#GetGrantRequest": {

```

```

"type": "structure",
"members": {
  "GrantArn": {
    "target": "com.amazonaws.licensemanager#Arn",
    "traits": {
      "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
      "smithy.api#required": {}
    }
  },
  "Version": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Grant version.</p>"
    }
  }
},
"traits": {
  "smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetGrantResponse": {
  "type": "structure",
  "members": {
    "Grant": {
      "target": "com.amazonaws.licensemanager#Grant",
      "traits": {
        "smithy.api#documentation": "<p>Grant details.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#GetLicense": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#GetLicenseRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#GetLicenseResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {

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```

        "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
    }
},
{
    "target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
    "smithy.api#documentation": "<p>Gets detailed information about the specified license.</p>"
}
},
"com.amazonaws.licensemanager#GetLicenseConfiguration": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#GetLicenseConfigurationRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetLicenseConfigurationResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Gets detailed information about the specified license configuration.</p>"
    }
}

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```

    }
  },
  "com.amazonaws.licensemanager#GetLicenseConfigurationRequest": {
    "type": "structure",
    "members": {
      "LicenseConfigurationArn": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
          "smithy.api#required": {}
        }
      },
    },
    "traits": {
      "smithy.api#input": {}
    }
  },
  "com.amazonaws.licensemanager#GetLicenseConfigurationResponse": {
    "type": "structure",
    "members": {
      "LicenseConfigurationId": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Unique ID for the license configuration.</p>"
        }
      },
      "LicenseConfigurationArn": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
        }
      },
      "Name": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Name of the license configuration.</p>"
        }
      },
      "Description": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Description of the license configuration.</p>"
        }
      },
      "LicenseCountingType": {
        "target": "com.amazonaws.licensemanager#LicenseCountingType",

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    "traits": {
      "smithy.api#documentation": "<p>Dimension for which the licenses are counted.</p>"
    }
  },
  "LicenseRules": {
    "target": "com.amazonaws.licensemanager#StringList",
    "traits": {
      "smithy.api#documentation": "<p>License rules.</p>"
    }
  },
  "LicenseCount": {
    "target": "com.amazonaws.licensemanager#BoxLong",

    "traits": {
      "smithy.api#documentation": "<p>Number of available licenses.</p>"
    }
  },
  "LicenseCountHardLimit": {
    "target": "com.amazonaws.licensemanager#BoxBoolean",
    "traits": {
      "smithy.api#documentation": "<p>Sets the number of available licenses as a hard limit.</p>"
    }
  },
  "ConsumedLicenses": {
    "target": "com.amazonaws.licensemanager#BoxLong",
    "traits": {
      "smithy.api#documentation": "<p>Number of licenses assigned to resources.</p>"
    }
  },
  "Status": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>License configuration status.</p>"
    }
  }
},
"OwnerAccountId": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Account ID of the owner of the license configuration.</p>"
  }
},
"ConsumedLicenseSummaryList": {
  "target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
  "traits": {
    "smithy.api#documentation": "<p>Summaries of the licenses consumed by resources.</p>"
  }
},

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"ManagedResourceSummaryList": {
  "target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
  "traits": {
    "smithy.api#documentation": "<p>Summaries of the managed resources.</p>"
  }
},
"Tags": {
  "target": "com.amazonaws.licensemanager#TagList",
  "traits": {
    "smithy.api#documentation": "<p>Tags for the license configuration.</p>"
  }
},
"ProductInformationList": {
  "target": "com.amazonaws.licensemanager#ProductInformationList",
  "traits": {
    "smithy.api#documentation": "<p>Product information.</p>"
  }
},
"AutomatedDiscoveryInformation": {
  "target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
  "traits": {
    "smithy.api#documentation": "<p>Automated discovery information.</p>"
  }
},
"DisassociateWhenNotFound": {
  "target": "com.amazonaws.licensemanager#BoxBoolean",
  "traits": {
    "smithy.api#documentation": "<p>When
true, disassociates a resource when software is uninstalled.</p>"
  }
},
"traits": {
  "smithy.api#output": {}
},
"com.amazonaws.licensemanager#GetLicenseConversionTask": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#GetLicenseConversionTaskRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    }
  ],

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    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Gets information about the specified license type conversion task.</p>"
  }
},
"com.amazonaws.licensemanager#GetLicenseConversionTaskRequest": {
  "type": "structure",
  "members": {
    "LicenseConversionTaskId": {
      "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
      "traits": {
        "smithy.api#documentation": "<p>ID of the license type conversion task to retrieve information on.</p>",
        "smithy.api#required": {}
      }
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#GetLicenseConversionTaskResponse": {
  "type": "structure",
  "members": {
    "LicenseConversionTaskId": {
      "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
      "traits": {
        "smithy.api#documentation": "<p>ID of the license type conversion task.</p>"
      }
    },
    "ResourceArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the resources the license conversion task is associated with.</p>"
      }
    }
  }
}

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```

    }
  },
  "SourceLicenseContext": {
    "target": "com.amazonaws.licensemanager#LicenseConversionContext",
    "traits": {
      "smithy.api#documentation": "<p>Information
about the license type converted from.</p>"
    }
  },
  "DestinationLicenseContext": {
    "target": "com.amazonaws.licensemanager#LicenseConversionContext",
    "traits": {
      "smithy.api#documentation": "<p>Information about the license type converted to.</p>"
    }
  },
  "StatusMessage": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>The status message for the conversion task.</p>"
    }
  },
  "Status": {
    "target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
    "traits": {
      "smithy.api#documentation": "<p>Status of the license type conversion task.</p>"
    }
  },
  "StartTime": {
    "target": "com.amazonaws.licensemanager#DateTime",
    "traits": {
      "smithy.api#documentation": "<p>Time at which the license type conversion task was started .</p>"
    }
  },
  "LicenseConversionTime": {
    "target": "com.amazonaws.licensemanager#DateTime",
    "traits": {
      "smithy.api#documentation": "<p>Amount of time to complete the license type conversion.</p>"
    }
  },
  "EndTime": {
    "target": "com.amazonaws.licensemanager#DateTime",
    "traits": {
      "smithy.api#documentation": "<p>Time at which the license type conversion task was
completed.</p>"
    }
  },
}

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```

    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#GetLicenseManagerReportGenerator":
{
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Gets information about the specified report generator.</p>"
  }
},
"com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest": {
  "type": "structure",
  "members": {
    "LicenseManagerReportGeneratorArn": {

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        "target": "com.amazonaws.licensemanager#String",
        "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator.</p>",
            "smithy.api#required":
        }
    }
},
"traits": {
    "smithy.api#input": {}
},
"com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse": {
    "type": "structure",
    "members": {
        "ReportGenerator": {
            "target": "com.amazonaws.licensemanager#ReportGenerator",
            "traits": {
                "smithy.api#documentation": "<p>A report generator that creates periodic reports about your license configurations.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#GetLicenseRequest": {
    "type": "structure",
    "members": {
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "Version": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
            "smithy.api#documentation": "<p>License version.</p>"
        }
    }
},
"traits": {
    "smithy.api#input": {}
}

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```

    },
    "com.amazonaws.licensemanager#GetLicenseResponse": {
      "type": "structure",
      "members": {
        "License": {
          "target": "com.amazonaws.licensemanager#License",
          "traits": {
            "smithy.api#documentation": "<p>License details.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#GetLicenseUsage": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#GetLicenseUsageRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#GetLicenseUsageResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
      ],
      "target": "com.amazonaws.licensemanager#ValidationException"
    },
    "traits": {
      "smithy.api#documentation": "<p>Gets detailed information about the usage of the specified license.</p>"
    }
  }
}

```

```

},
"com.amazonaws.licensemanager#GetLicenseUsageRequest": {
  "type": "structure",
  "members": {
    "LicenseArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
        "smithy.api#required": {}
      }
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#GetLicenseUsageResponse": {
  "type": "structure",
  "members": {
    "LicenseUsage": {
      "target":
"com.amazonaws.licensemanager#LicenseUsage",
      "traits": {
        "smithy.api#documentation": "<p>License usage details.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#GetServiceSettings": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#GetServiceSettingsRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#GetServiceSettingsResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    }
  ]
}

```

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    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Gets the License Manager settings for the current Region.</p>"
  }
},
"com.amazonaws.licensemanager#GetServiceSettingsRequest": {
  "type": "structure",
  "members": {},
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#GetServiceSettingsResponse": {
  "type": "structure",
  "members": {
    "S3BucketArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Regional S3 bucket path for storing reports, license trail event data,
discovery data,\n      and so on.</p>"
      }
    }
  },
  "SnsTopicArn": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>SNS topic configured to receive notifications from License
Manager.</p>"
    }
  },
  "OrganizationConfiguration": {
    "target": "com.amazonaws.licensemanager#OrganizationConfiguration",
    "traits": {
      "smithy.api#documentation": "<p>Indicates whether Organizations is integrated with License
Manager for\n      cross-account discovery.</p>"
    }
  },
  "EnableCrossAccountsDiscovery": {
    "target": "com.amazonaws.licensemanager#BoxBoolean",
    "traits": {
      "smithy.api#documentation": "<p>Indicates whether cross-account discovery is enabled.</p>"
    }
  }
}

```



```

    },
    "LicenseManagerResourceShareArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource share. The License
Manager management account \n      provides member accounts with access to this share.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#Grant": {
  "type": "structure",
  "members": {
    "GrantArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
        "smithy.api#required": {}
      }
    },
    "GrantName": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Grant name.</p>",
        "smithy.api#required": {}
      }
    },
    "ParentArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>Parent ARN.</p>",
        "smithy.api#required": {}
      }
    },
    "LicenseArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>License ARN.</p>",
        "smithy.api#required": {}
      }
    },
    "GranteePrincipalArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {

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"smithy.api#documentation": "<p>The grantee principal ARN.</p>",
  "smithy.api#required": {}
},
"HomeRegion": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Home Region of the grant.</p>",
    "smithy.api#required": {}
  }
},
"GrantStatus": {
  "target": "com.amazonaws.licensemanager#GrantStatus",
  "traits": {
    "smithy.api#documentation": "<p>Grant status.</p>",
    "smithy.api#required": {}
  }
},
"StatusReason": {
  "target": "com.amazonaws.licensemanager#StatusReasonMessage",
  "traits": {
    "smithy.api#documentation": "<p>Grant status reason.</p>"
  }
},
"Version": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Grant version.</p>",
    "smithy.api#required": {}
  }
},
"GrantedOperations": {
  "target": "com.amazonaws.licensemanager#AllowedOperationList",
  "traits": {
    "smithy.api#documentation": "<p>Granted operations.</p>",
    "smithy.api#required": {}
  }
},
"Options": {
  "target": "com.amazonaws.licensemanager#Options",
  "traits": {
    "smithy.api#documentation": "<p>The options specified for the grant.</p>"
  }
},
"traits": {
  "smithy.api#documentation":

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"<p>Describes a grant.</p>"
  }
},
"com.amazonaws.licensemanager#GrantList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#Grant"
  }
},
"com.amazonaws.licensemanager#GrantStatus": {
  "type": "enum",
  "members": {
    "PENDING_WORKFLOW": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "PENDING_WORKFLOW"
      }
    },
    "PENDING_ACCEPT": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "PENDING_ACCEPT"
      }
    },
    "REJECTED": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "REJECTED"
      }
    }
  },
  "ACTIVE": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "ACTIVE"
    }
  },
  "FAILED_WORKFLOW": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "FAILED_WORKFLOW"
    }
  },
  "DELETED": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "DELETED"
    }
  }
}

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    },
    "PENDING_DELETE": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "PENDING_DELETE"
      }
    },
    "DISABLED": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "DISABLED"
      }
    },
    "WORKFLOW_COMPLETED": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "WORKFLOW_COMPLETED"
      }
    }
  }
},
"com.amazonaws.licensemanager#GrantedLicense": {
  "type": "structure",
  "members": {
    "LicenseArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
      }
    },
    "LicenseName": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>License name.</p>"
      }
    }
  }
},
"ProductName": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Product name.</p>"
  }
},
"ProductSKU": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Product SKU.</p>"
  }
}

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    }
  },
  "Issuer": {
    "target": "com.amazonaws.licensemanager#IssuerDetails",
    "traits": {
      "smithy.api#documentation": "<p>Granted license issuer.</p>"
    }
  },
  "HomeRegion": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Home Region of the granted license.</p>"
    }
  },
  "Status": {
    "target": "com.amazonaws.licensemanager#LicenseStatus",
    "traits": {
      "smithy.api#documentation": "<p>Granted license status.</p>"
    }
  },
  "Validity": {
    "target": "com.amazonaws.licensemanager#DatetimeRange",
    "traits": {
      "smithy.api#documentation": "<p>Date and time range during which the granted license is valid, in ISO8601-UTC format.</p>"
    }
  },
  "Beneficiary": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Granted license beneficiary.</p>"
    }
  },
  "Entitlements": {
    "target": "com.amazonaws.licensemanager#EntitlementList",
    "traits": {
      "smithy.api#documentation": "<p>License entitlements.</p>"
    }
  },
  "ConsumptionConfiguration": {
    "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
    "traits": {
      "smithy.api#documentation": "<p>Configuration for consumption of the license.</p>"
    }
  },
  "LicenseMetadata": {
    "target": "com.amazonaws.licensemanager#MetadataList",

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    "traits": {
      "smithy.api#documentation": "<p>Granted license metadata.</p>"
    }
  },
  "CreateTime": {
    "target": "com.amazonaws.licensemanager#ISO8601DateTime",
    "traits": {
      "smithy.api#documentation": "<p>Creation time of the granted license.</p>"
    }
  }
},
"Version": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Version of the granted license.</p>"
  }
},
"ReceivedMetadata": {
  "target": "com.amazonaws.licensemanager#ReceivedMetadata",
  "traits": {
    "smithy.api#documentation": "<p>Granted license received metadata.</p>"
  }
},
"traits": {
  "smithy.api#documentation": "<p>Describes a license that is granted to a grantee.</p>"
},
"com.amazonaws.licensemanager#GrantedLicenseList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#GrantedLicense"
  }
},
"com.amazonaws.licensemanager#ISO8601DateTime":
{
  "type": "string",
  "traits": {
    "smithy.api#length": {
      "min": 0,
      "max": 50
    },
    "smithy.api#pattern": "^(-(?:[1-9][0-9]*)?[0-9]{4})-(1[0-2]|0[1-9])-(3[0-1]|0[1-9]|1-2)[0-9]T(2[0-3]|[0-1][0-9]):([0-5][0-9]):([0-5][0-9])(\\.([0-9]+)?(?:Z|[+-](?:2[ 0-3]|[0-1][0-9]):[0-5][0-9])+$)"
  }
},
"com.amazonaws.licensemanager#Integer": {
  "type": "integer"
}

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```

    },
    "com.amazonaws.licensemanager#InvalidParameterValueException": {
      "type": "structure",
      "members": {
        "Message": {
          "target": "com.amazonaws.licensemanager#Message"
        }
      },
      "traits": {
        "aws.protocols#awsQueryError": {
          "code": "InvalidParameterValueProvided",
          "httpResponseCode": 400
        },
        "smithy.api#documentation":
"

One or more parameter values are not valid.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
      }
    },
    "com.amazonaws.licensemanager#InvalidResourceStateException": {
      "type": "structure",
      "members": {
        "Message": {
          "target": "com.amazonaws.licensemanager#Message"
        }
      },
      "traits": {
        "aws.protocols#awsQueryError": {
          "code": "InvalidResourceState",
          "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>License Manager cannot allocate a license to a resource because of its
state.</p>\n    <p>For example, you cannot allocate a license to an instance in the process of shutting\n
down.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
      }
    },
    "com.amazonaws.licensemanager#InventoryFilter": {
      "type": "structure",
      "members": {
        "Name": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Name of the filter.</p>",
            "smithy.api#required": {}
          }
        }
      }
    }


```

```

    },
    "Condition": {
      "target": "com.amazonaws.licensemanager#InventoryFilterCondition",
      "traits": {
        "smithy.api#documentation": "<p>Condition of the filter.</p>",
        "smithy.api#required": {}
      }
    },
    "Value": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Value of the filter.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>An inventory filter.</p>"
  }
},
"com.amazonaws.licensemanager#InventoryFilterCondition": {
  "type": "enum",
  "members": {
    "EQUALS": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "EQUALS"
      }
    },
    "NOT_EQUALS": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "NOT_EQUALS"
      }
    },
    "BEGINS_WITH": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "BEGINS_WITH"
      }
    },
    "CONTAINS": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "CONTAINS"
      }
    }
  }
}

```



```

    },
    "com.amazonaws.licensemanager#InventoryFilterList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#InventoryFilter"
      }
    },
    "com.amazonaws.licensemanager#Issuer": {
      "type": "structure",
      "members": {
        "Name": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Issuer name.</p>",
            "smithy.api#required": {}
          }
        },
        "SignKey": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Asymmetric KMS key from Key Management Service. The KMS
key must have a key usage
of sign and verify, \n      and support the RSASSA-PSS SHA-256 signing algorithm.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Details about the issuer of a license.</p>"
      }
    },
    "com.amazonaws.licensemanager#IssuerDetails": {
      "type": "structure",
      "members": {
        "Name": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Issuer name.</p>"
          }
        },
        "SignKey": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Asymmetric KMS key from Key Management Service. The KMS
key must have a key usage of sign and verify, \n      and support the RSASSA-PSS SHA-256 signing
algorithm.</p>"
          }
        },
        "KeyFingerprint": {

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```

    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Issuer key fingerprint.</p>"
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Details associated with the issuer of a license.</p>"
  }
},
"com.amazonaws.licensemanager#License": {
  "type": "structure",
  "members": {
    "LicenseArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
      }
    },
    "LicenseName": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>License name.</p>"
      }
    },
    "ProductName": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Product name.</p>"
      }
    },
    "ProductSKU": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Product SKU.</p>"
      }
    },
    "Issuer": {
      "target": "com.amazonaws.licensemanager#IssuerDetails",
      "traits": {
        "smithy.api#documentation": "<p>License issuer.</p>"
      }
    },
    "HomeRegion": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {

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"smithy.api#documentation": "<p>Home Region of the license.</p>"
  }
},
"Status": {
  "target": "com.amazonaws.licensemanager#LicenseStatus",
  "traits": {
    "smithy.api#documentation": "<p>License status.</p>"
  }
},
"Validity": {
  "target": "com.amazonaws.licensemanager#DatetimeRange",
  "traits": {
    "smithy.api#documentation": "<p>Date and time range during which the license is valid, in ISO8601-
UTC format.</p>"
  }
},
"Beneficiary": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>License beneficiary.</p>"
  }
},
"Entitlements": {
  "target": "com.amazonaws.licensemanager#EntitlementList",
  "traits": {
    "smithy.api#documentation": "<p>License entitlements.</p>"
  }
},
"ConsumptionConfiguration": {
  "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
  "traits": {
    "smithy.api#documentation": "<p>Configuration for consumption of the license.</p>"
  }
},
"LicenseMetadata": {
  "target": "com.amazonaws.licensemanager#MetadataList",
  "traits": {
    "smithy.api#documentation": "<p>License metadata.</p>"
  }
},
"CreateTime": {
  "target": "com.amazonaws.licensemanager#ISO8601DateTime",
  "traits": {
    "smithy.api#documentation": "<p>License
creation time.</p>"
  }
},

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"Version": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>License version.</p>"
  }
},
"traits": {
  "smithy.api#documentation": "<p>Software license that is managed in License Manager.</p>"
},
"com.amazonaws.licensemanager#LicenseConfiguration": {
  "type": "structure",
  "members": {
    "LicenseConfigurationId": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Unique ID of the license configuration.</p>"
      }
    },
    "LicenseConfigurationArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
      }
    },
    "Name": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Name of the license configuration.</p>"
      }
    },
    "Description": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Description of the license configuration.</p>"
      }
    },
    "LicenseCountingType": {
      "target": "com.amazonaws.licensemanager#LicenseCountingType",
      "traits": {
        "smithy.api#documentation": "<p>Dimension to use to track the license inventory.</p>"
      }
    },
    "LicenseRules": {
      "target": "com.amazonaws.licensemanager#StringList",
      "traits": {
        "smithy.api#documentation": "<p>License rules.</p>"
      }
    }
  }
}

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    }
  },
  "LicenseCount": {
    "target": "com.amazonaws.licensemanager#BoxLong",
    "traits": {
      "smithy.api#documentation": "<p>Number of licenses managed by the license configuration.</p>"
    }
  },
  "LicenseCountHardLimit": {
    "target": "com.amazonaws.licensemanager#BoxBoolean",
    "traits": {
      "smithy.api#documentation": "<p>Number of available licenses as a hard limit.</p>"
    }
  },
  "DisassociateWhenNotFound": {
    "target": "com.amazonaws.licensemanager#BoxBoolean",
    "traits": {
      "smithy.api#documentation": "<p>When true, disassociates a resource when software is
uninstalled.</p>"
    }
  },
  "ConsumedLicenses": {
    "target": "com.amazonaws.licensemanager#BoxLong",
    "traits": {
      "smithy.api#documentation": "<p>Number of licenses consumed. </p>"
    }
  },
  "Status": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Status of the license configuration.</p>"
    }
  },
  "OwnerAccountId": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Account ID of the license configuration's owner.</p>"
    }
  },
  "ConsumedLicenseSummaryList": {
    "target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
    "traits": {
      "smithy.api#documentation": "<p>Summaries for licenses consumed by various resources.</p>"
    }
  },
  "ManagedResourceSummaryList": {
    "target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",

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    "traits": {
      "smithy.api#documentation": "<p>Summaries for managed resources.</p>"
    }
  },
  "ProductInformationList": {
    "target": "com.amazonaws.licensemanager#ProductInformationList",
    "traits": {
      "smithy.api#documentation": "<p>Product information.</p>"
    }
  },
  "AutomatedDiscoveryInformation": {
    "target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
    "traits": {
      "smithy.api#documentation": "<p>Automated discovery information.</p>"
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>A license configuration is an abstraction of a customer license agreement that can be\n    consumed and enforced by License Manager. Components include specifications for the license\n    type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n    Dedicated Instance, Dedicated Host, or all of these), host affinity (how long a VM\n    must be associated with a host), and the number of licenses purchased and used.</p>"
  },
  "com.amazonaws.licensemanager#LicenseConfigurationAssociation": {
    "type": "structure",
    "members": {
      "ResourceArn":
    {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
      }
    },
      "ResourceType": {
        "target": "com.amazonaws.licensemanager#ResourceType",
        "traits": {
          "smithy.api#documentation": "<p>Type of server resource.</p>"
        }
      },
      "ResourceOwnerId": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>ID of the Amazon Web Services account that owns the resource consuming licenses.</p>"
        }
      }
    }
  }
}

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```

    },
    "AssociationTime": {
      "target": "com.amazonaws.licensemanager#DateTime",
      "traits": {
        "smithy.api#documentation": "<p>Time when the license configuration was associated with the resource.</p>"
      }
    },
    "AmiAssociationScope": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Scope of AMI associations. The possible value is <code>cross-account</code>.</p>"
      }
    },
    "traits": {
      "smithy.api#documentation": "<p>Describes an association with a license configuration.</p>"
    },
    "com.amazonaws.licensemanager#LicenseConfigurationAssociations": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#LicenseConfigurationAssociation"
      }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationStatus": {
      "type": "enum",
      "members": {
        "AVAILABLE": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "AVAILABLE"
          }
        },
        "DISABLED": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "DISABLED"
          }
        }
      }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationUsage": {
      "type": "structure",
      "members": {
        "ResourceArn": {

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    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
    }
  },
  "ResourceType": {
    "target": "com.amazonaws.licensemanager#ResourceType",
    "traits": {
      "smithy.api#documentation": "<p>Type of resource.</p>"
    }
  },
  "ResourceStatus": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Status of the resource.</p>"
    }
  },
  "ResourceOwnerId": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>ID of the account that owns the resource.</p>"
    }
  },
  "AssociationTime": {
    "target": "com.amazonaws.licensemanager#DateTime",
    "traits": {
      "smithy.api#documentation": "<p>Time when the license configuration was initially associated with
the resource.</p>"
    }
  },

  "ConsumedLicenses": {
    "target": "com.amazonaws.licensemanager#BoxLong",
    "traits": {
      "smithy.api#documentation": "<p>Number of licenses consumed by the resource.</p>"
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Details about the usage of a resource associated with a license
configuration.</p>"
  },
  "com.amazonaws.licensemanager#LicenseConfigurationUsageList": {
    "type": "list",
    "member": {
      "target": "com.amazonaws.licensemanager#LicenseConfigurationUsage"
    }
  }
}

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    }
  },
  "com.amazonaws.licensemanager#LicenseConfigurations": {
    "type": "list",
    "member": {
      "target": "com.amazonaws.licensemanager#LicenseConfiguration"
    }
  },
  "com.amazonaws.licensemanager#LicenseConversionContext": {
    "type": "structure",
    "members": {
      "UsageOperation": {
        "target": "com.amazonaws.licensemanager#UsageOperation",
        "traits": {
          "smithy.api#documentation": "<p>The Usage operation value that corresponds to the license type you
are converting your resource from. For more information about which platforms correspond to which usage
operation values see <a href=\\"https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/billing-info-
fields.html#billing-info\\>Sample data: usage operation by platform\n  </a>\n  </p>"
        }
      }
    },
    "traits": {
      "smithy.api#documentation": "<p>Information about a license type conversion task.</p>"
    }
  },
  "com.amazonaws.licensemanager#LicenseConversionTask": {
    "type": "structure",
    "members": {
      "LicenseConversionTaskId": {
        "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
        "traits": {
          "smithy.api#documentation": "<p>The ID of the license type conversion task.</p>"
        }
      },
      "ResourceArn": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource associated
with the license type\n  conversion task.</p>"
        }
      }
    },
    "SourceLicenseContext": {
      "target": "com.amazonaws.licensemanager#LicenseConversionContext",
      "traits": {
        "smithy.api#documentation": "<p>Information about the license type this conversion task converted
from.</p>"
      }
    }
  }
}

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    }
  },
  "DestinationLicenseContext": {
    "target":
"com.amazonaws.licensemanager#LicenseConversionContext",
    "traits": {
      "smithy.api#documentation": "<p>Information about the license type this conversion task converted
to.</p>"
    }
  },
  "Status": {
    "target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
    "traits": {
      "smithy.api#documentation": "<p>The status of the conversion task.</p>"
    }
  },
  "StatusMessage": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>The status message for the conversion task.</p>"
    }
  },
  "StartTime": {
    "target": "com.amazonaws.licensemanager#DateTime",
    "traits": {
      "smithy.api#documentation":
"<p>The time the conversion task was started at.</p>"
    }
  },
  "LicenseConversionTime": {
    "target": "com.amazonaws.licensemanager#DateTime",
    "traits": {
      "smithy.api#documentation": "<p>The time the usage operation value of the resource was
changed.</p>"
    }
  },
  "EndTime": {
    "target": "com.amazonaws.licensemanager#DateTime",
    "traits": {
      "smithy.api#documentation": "<p>The time the conversion task was completed.</p>"
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Information about a license type conversion task.</p>"
  }
},
"com.amazonaws.licensemanager#LicenseConversionTaskId": {

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    "type": "string",
    "traits": {

    "smithy.api#length": {
        "min": 0,
        "max": 50
    },
    "smithy.api#pattern": "^lct-[a-zA-Z0-9]*$"
    }
},
"com.amazonaws.licensemanager#LicenseConversionTaskStatus": {
    "type": "enum",
    "members": {
        "IN_PROGRESS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "IN_PROGRESS"
            }
        },
        "SUCCEEDED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "SUCCEEDED"
            }
        },
        "FAILED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "FAILED"
            }
        }
    }
},
"com.amazonaws.licensemanager#LicenseConversionTasks":
{
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#LicenseConversionTask"
    }
},
"com.amazonaws.licensemanager#LicenseCountingType": {
    "type": "enum",
    "members": {
        "VCPU": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "vCPU"
            }
        }
    }
}

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    },
    "INSTANCE": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Instance"
      }
    },
    "CORE": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Core"
      }
    },
    "SOCKET": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Socket"
      }
    }
  }
},
"com.amazonaws.licensemanager#LicenseDeletionStatus": {
  "type": "enum",
  "members": {
    "PENDING_DELETE": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "PENDING_DELETE"
      }
    },
    "DELETED": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "DELETED"
      }
    }
  }
},
"com.amazonaws.licensemanager#LicenseList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#License"
  }
},
"com.amazonaws.licensemanager#LicenseOperationFailure": {
  "type": "structure",
  "members": {

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"ResourceArn": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
  }
},
"ResourceType": {
  "target": "com.amazonaws.licensemanager#ResourceType",
  "traits": {
    "smithy.api#documentation": "<p>Resource type.</p>"
  }
},
"ErrorMessage": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Error message.</p>"
  }
},
"FailureTime": {
  "target": "com.amazonaws.licensemanager#DateTime",
  "traits": {
    "smithy.api#documentation": "<p>Failure time.</p>"
  }
},
"OperationName": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Name of the operation.</p>"
  }
},
"ResourceOwnerId": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>ID of the Amazon Web Services account that owns the
resource.</p>"
  }
},
"OperationRequestedBy": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>The requester is \"License Manager Automated Discovery\".</p>"
  }
},
"MetadataList": {
  "target": "com.amazonaws.licensemanager#MetadataList",
  "traits": {

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        "smithy.api#documentation": "<p>Reserved.</p>"
    }
}
},
"traits": {
    "smithy.api#documentation": "<p>Describes the failure of a license operation.</p>"
}
},
"com.amazonaws.licensemanager#LicenseOperationFailureList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#LicenseOperationFailure"
    }
},
"com.amazonaws.licensemanager#LicenseSpecification": {
    "type": "structure",
    "members": {
        "LicenseConfigurationArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                "smithy.api#required": {}
            }
        },
        "AmiAssociationScope": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Scope of AMI associations. The possible value is <code>cross-
account</code>.</p>"
            }
        }
    }
},
"traits": {
    "smithy.api#documentation": "<p>Details for associating a license configuration with a resource.</p>"
}
},
"com.amazonaws.licensemanager#LicenseSpecifications": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#LicenseSpecification"
    }
},
"com.amazonaws.licensemanager#LicenseStatus": {
    "type": "enum",
    "members": {
        "AVAILABLE": {

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    "target": "smithy.api#Unit",

    "traits": {
      "smithy.api#enumValue": "AVAILABLE"
    }
  },
  "PENDING_AVAILABLE": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "PENDING_AVAILABLE"
    }
  },
  "DEACTIVATED": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "DEACTIVATED"
    }
  },
  "SUSPENDED": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "SUSPENDED"
    }
  },
  "EXPIRED": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "EXPIRED"
    }
  },

  "PENDING_DELETE": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "PENDING_DELETE"
    }
  },
  "DELETED": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "DELETED"
    }
  }
},
"com.amazonaws.licensemanager#LicenseUsage": {
  "type": "structure",
  "members": {

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    "EntitlementUsages": {
      "target": "com.amazonaws.licensemanager#EntitlementUsageList",
      "traits": {
        "smithy.api#documentation": "<p>License entitlement usages.</p>"
      }
    },
    "traits": {
      "smithy.api#documentation": "<p>Describes the entitlement usage associated with a license.</p>"
    }
  },
  "com.amazonaws.licensemanager#LicenseUsageException": {
    "type": "structure",
    "members": {
      "Message": {
        "target": "com.amazonaws.licensemanager#Message"
      }
    },
    "traits": {
      "aws.protocols#awsQueryError": {
        "code": "LicenseUsageFailure",
        "httpResponseCode": 412
      },
      "smithy.api#documentation": "<p>You do not have enough licenses available to support a new resource launch.</p>",
      "smithy.api#error": "client",
      "smithy.api#httpError": 412
    }
  },
  "com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
      }
    ]
  }
}

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    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Lists the resource associations for the
specified license configuration.</p>\n    <p>Resource associations need not consume licenses from a license
configuration. \n    For example, an AMI or a stopped instance might not consume a license (depending on \n
the license rules).</p>"
  }
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest": {
  "type": "structure",
  "members": {
    "LicenseConfigurationArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of a license configuration.</p>",
        "smithy.api#required": {}
      }
    },
    "MaxResults": {
      "target": "com.amazonaws.licensemanager#BoxInteger",
      "traits": {
        "smithy.api#documentation": "<p>Maximum number of results
to return in a single call.</p>"
      }
    },
    "NextToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse": {
  "type": "structure",

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"members": {
  "LicenseConfigurationAssociations": {
    "target": "com.amazonaws.licensemanager#LicenseConfigurationAssociations",
    "traits": {
      "smithy.api#documentation": "<p>Information about the associations for the license
configuration.</p>"
    }
  },
  "NextToken": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Token for the next set of results.</p>"
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#ListDistributedGrants": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#ListDistributedGrantsRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#ListDistributedGrantsResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {

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        "target": "com.amazonaws.licensemanager#ValidationException"
    }
],
"traits": {
    "smithy.api#documentation": "<p>Lists the grants distributed for the specified license.</p>"
}
},
"com.amazonaws.licensemanager#ListDistributedGrantsRequest": {
    "type": "structure",
    "members": {
        "GrantArns": {
            "target": "com.amazonaws.licensemanager#ArnList",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the grants.</p>"
            }
        },
        "Filters": {
            "target": "com.amazonaws.licensemanager#FilterList",
            "traits": {
                "smithy.api#documentation": "<p>Filters to scope the results. The following filters are supported:</p>\n
                <ul>\n
                <li>\n
                <p>\n
                <code>LicenseArn</code>\n
                </p>\n
                </li>\n
                <li>\n
                <p>\n
                <code>GrantStatus</code>\n
                </p>\n
                </li>\n
                <li>\n
                <p>\n
                <code>GranteePrincipalARN</code>\n
                </p>\n
                </li>\n
                <li>\n
                <p>\n
                <code>ProductSKU</code>\n
                </p>\n
                </li>\n
                <li>\n
                <p>\n
                <code>LicenseIssuerName</code>\n
                </p>\n
                </li>\n
                </ul>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        },
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#ListDistributedGrantsResponse": {
    "type": "structure",

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"members": {
  "Grants": {
    "target": "com.amazonaws.licensemanager#GrantList",

"traits": {
  "smithy.api#documentation": "<p>Distributed grant details.</p>"
  },
  "NextToken": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Token for the next set of results.</p>"
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse"
  },
  "errors": [
    {
"target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Lists the license configuration operations that failed.</p>"
  }
}

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    },
    "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest": {
      "type": "structure",
      "members": {
        "LicenseConfigurationArn": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name of the license configuration.</p>",
            "smithy.api#required": {}
          }
        },
        "MaxResults": {
          "target": "com.amazonaws.licensemanager#BoxInteger",
          "traits": {
            "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse":
  {
    "type": "structure",
    "members": {
      "LicenseOperationFailureList": {
        "target": "com.amazonaws.licensemanager#LicenseOperationFailureList",
        "traits": {
          "smithy.api#documentation": "<p>License configuration operations that failed.</p>"
        }
      },
      "NextToken": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Token for the next set of results.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  }

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    },
    "com.amazonaws.licensemanager#ListLicenseConfigurations": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Lists the license configurations for your account.</p>"
      }
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest": {
      "type": "structure",
      "members": {
        "LicenseConfigurationArns": {
          "target": "com.amazonaws.licensemanager#StringList",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the license configurations.</p>"
          }
        },
        "MaxResults": {
          "target": "com.amazonaws.licensemanager#BoxInteger",
          "traits": {

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    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
  }
},
"NextToken": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Token for the next
set of results.</p>"
  }
},
"Filters": {
  "target": "com.amazonaws.licensemanager#Filters",
  "traits": {
    "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
operators\n are supported:</p>\n <ul>\n <li>\n <p>\n
<code>licenseCountingType</code> - The dimension for which licenses are counted.\n Possible values are
<code>vCPU</code> | <code>Instance</code> | <code>Core</code> | <code>Socket</code>.\n Logical
operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n </li>\n <li>\n
<p>\n <code>enforceLicenseCount</code> - A Boolean value that indicates whether hard license
enforcement is used. \n Logical operators are <code>EQUALS</code> |
<code>NOT_EQUALS</code>.</p>\n
</li>\n <li>\n <p>\n <code>usagelimitExceeded</code> - A Boolean value that
indicates whether the available licenses have been exceeded. \n Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n </li>\n </ul>"
  }
}
},
"traits": {
  "smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicenseConfigurationsResponse": {
  "type": "structure",
  "members": {
    "LicenseConfigurations": {
      "target": "com.amazonaws.licensemanager#LicenseConfigurations",
      "traits": {
        "smithy.api#documentation": "<p>Information about the license configurations.</p>"
      }
    },
    "NextToken": {
      "target": "com.amazonaws.licensemanager#String",

      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    }
  }
},

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    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#ListLicenseConversionTasks": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
      }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Lists the license type conversion tasks for your account.</p>"
    }
  },
  "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest": {
    "type": "structure",
    "members": {
      "NextToken": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Token for the next set of results.</p>"
        }
      },
      "MaxResults": {
        "target": "com.amazonaws.licensemanager#BoxInteger",
        "traits": {
          "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
        }
      }
    }
  }
}

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    },
    "Filters": {
      "target": "com.amazonaws.licensemanager#Filters",
      "traits": {
        "smithy.api#documentation": "<p>\n    Filters to scope the results. Valid filters are
<code>ResourceArns</code> and <code>Status</code>.\n    </p>"
      }
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#ListLicenseConversionTasksResponse": {
  "type": "structure",
  "members": {
    "LicenseConversionTasks": {
      "target": "com.amazonaws.licensemanager#LicenseConversionTasks",
      "traits": {
        "smithy.api#documentation": "<p>Information about the license configuration tasks for your
account.</p>"
      }
    },
    "NextToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#ListLicenseManagerReportGenerators": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target":

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"com.amazonaws.licensemanager#AuthorizationException"
  },
  {
    "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
  },
  {
    "target": "com.amazonaws.licensemanager#RateLimitExceededException"
  },
  {
    "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
  },
  {
    "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
  },
  {
    "target": "com.amazonaws.licensemanager#ServerInternalException"
  },
  {
    "target": "com.amazonaws.licensemanager#ValidationException"
  }
],
"traits": {
  "smithy.api#documentation": "<p>Lists the report generators for your account.</p>"
}
},
"com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest":
{
  "type": "structure",
  "members": {
    "Filters": {
      "target": "com.amazonaws.licensemanager#FilterList",
      "traits": {
        "smithy.api#documentation": "<p>Filters to scope the results. The following filters are supported:
</p>\n  <ul>\n    <li>\n      <p>\n        <code>LicenseConfigurationArn</code>\n      </li>\n    </ul>\n"
      }
    },
    "NextToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    },
    "MaxResults": {
      "target": "com.amazonaws.licensemanager#MaxSize100",
      "traits": {
        "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
      }
    }
  }
}

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    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse": {
  "type": "structure",
  "members": {
    "ReportGenerators": {
      "target": "com.amazonaws.licensemanager#ReportGeneratorList",
      "traits": {
        "smithy.api#documentation": "<p>A report generator that creates periodic reports about your license configurations.</p>"
      }
    },
    "NextToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    }
  }
},
"traits": {
  "smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResource": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {

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        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
    }
],
"traits": {
    "smithy.api#documentation": "<p>Describes the license configurations for the specified resource.</p>"
}
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest": {
    "type": "structure",
    "members": {
        "ResourceArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of a resource that has an
associated license configuration.</p>",
                "smithy.api#required": {}
            }
        },
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse": {
    "type": "structure",
    "members": {
        "LicenseSpecifications": {
            "target": "com.amazonaws.licensemanager#LicenseSpecifications",
            "traits": {
                "smithy.api#documentation": "<p>License configurations associated with a resource.</p>"
            }
        }
    },
}

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    "NextToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    },
    "traits": {
      "smithy.api#output": {}
    },
    "com.amazonaws.licensemanager#ListLicenseVersions": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Lists all versions of the specified license.</p>"
      }
    },
    "com.amazonaws.licensemanager#ListLicenseVersionsRequest": {
      "type": "structure",
      "members": {
        "LicenseArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
            "smithy.api#required": {}
          }
        }
      }
    }
  }

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    }
  },
  "NextToken": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Token for the next set of results.</p>"
    }
  },
  "MaxResults": {
    "target": "com.amazonaws.licensemanager#MaxSize100",
    "traits": {
      "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
    }
  }
},
"traits": {
  "smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicenseVersionsResponse": {
  "type": "structure",
  "members": {
    "Licenses": {
      "target": "com.amazonaws.licensemanager#LicenseList",
      "traits": {
        "smithy.api#documentation": "<p>License details.</p>"
      }
    }
  },
  "NextToken": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Token for the next set of results.</p>"
    }
  }
},
"traits": {
  "smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListLicenses": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#ListLicensesRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#ListLicensesResponse"
  },

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"errors": [
  {
    "target": "com.amazonaws.licensemanager#AccessDeniedException"
  },
  {
    "target": "com.amazonaws.licensemanager#AuthorizationException"
  },
  {
    "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
  },
  {
    "target": "com.amazonaws.licensemanager#RateLimitExceededException"
  },
  {
    "target": "com.amazonaws.licensemanager#ServerInternalException"
  },
  {
    "target": "com.amazonaws.licensemanager#ValidationException"
  }
],
"traits": {
  "smithy.api#documentation": "<p>Lists the licenses for your account.</p>"
}
},
"com.amazonaws.licensemanager#ListLicensesRequest": {
  "type": "structure",
  "members": {
    "LicenseArns": {
      "target": "com.amazonaws.licensemanager#ArnList",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the licenses.</p>"
      }
    }
  }
},

"Filters": {
  "target": "com.amazonaws.licensemanager#FilterList",
  "traits": {
    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n  <ul>\n    <li>\n      <p>\n        <code>Beneficiary</code>\n      </p>\n    </li>\n    <li>\n      <p>\n        <code>ProductSKU</code>\n      </p>\n    </li>\n    <li>\n      <p>\n        <code>Fingerprint</code>\n      </p>\n    </li>\n    <li>\n      <p>\n        <code>Status</code>\n      </p>\n    </li>\n  </ul>"
  }
},
"NextToken": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Token

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for the next set of results.</p>"

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    }
  },
  "MaxResults": {
    "target": "com.amazonaws.licensemanager#MaxSize100",
    "traits": {
      "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
    }
  }
},
"traits": {
  "smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicensesResponse": {
  "type": "structure",
  "members": {
    "Licenses": {
      "target": "com.amazonaws.licensemanager#LicenseList",
      "traits": {
        "smithy.api#documentation": "<p>License details.</p>"
      }
    },
    "NextToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#ListReceivedGrants": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#ListReceivedGrantsRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#ListReceivedGrantsResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
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    "target": "com.amazonaws.licensemanager#AuthorizationException"
  },
  {
    "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
  },
  {
    "target": "com.amazonaws.licensemanager#RateLimitExceededException"
  },
  {
    "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
  },
  {
    "target": "com.amazonaws.licensemanager#ServerInternalException"
  },
  {
    "target": "com.amazonaws.licensemanager#ValidationException"
  }
],
"traits": {
  "smithy.api#documentation": "<p>Lists grants that are received. Received grants are grants created while specifying the recipient as this Amazon Web Services account, your organization, or an organizational unit (OU) to which this member account belongs.</p>"
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsForOrganization": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
    }
  ],

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    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target":
"com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Lists the grants received for all accounts in the organization.</p>"
  }
},
"com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest": {
  "type": "structure",
  "members": {
    "LicenseArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the received license.</p>",
        "smithy.api#required": {}
      }
    },
    "Filters": {
      "target": "com.amazonaws.licensemanager#FilterList",
      "traits": {
        "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n
      <ul>\n
        <li>\n
          <p>\n
            <code>ParentArn</code>\n
          </p>\n
        </li>\n
        <li>\n
          <p>\n
            <code>GranteePrincipalArn</code>\n
          </p>\n
        </li>\n
      </ul>"
      }
    },
    "NextToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    },
    "MaxResults": {
      "target": "com.amazonaws.licensemanager#MaxSize100",
      "traits": {
        "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},

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"com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse":
{
  "type": "structure",
  "members": {
    "Grants": {
      "target": "com.amazonaws.licensemanager#GrantList",
      "traits": {
        "smithy.api#documentation": "<p>Lists the grants the organization has received.</p>"
      }
    },
    "NextToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#ListReceivedGrantsRequest": {
  "type": "structure",
  "members": {
    "GrantArns": {
      "target": "com.amazonaws.licensemanager#ArnList",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the grants.</p>"
      }
    },
    "Filters": {
      "target": "com.amazonaws.licensemanager#FilterList",
      "traits": {
        "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n      <ul>\n        <li>\n          <p>\n            <code>ProductSKU</code>\n          </p>\n        </li>\n        <li>\n          <p>\n            <code>LicenseIssuerName</code>\n          </p>\n        </li>\n        <li>\n          <p>\n            <code>LicenseArn</code>\n          </p>\n        </li>\n        <li>\n          <p>\n            <code>GrantStatus</code>\n          </p>\n        </li>\n        <li>\n          <p>\n            <code>GranterAccountId</code>\n          </p>\n        </li>\n      </ul>"
      }
    },
    "NextToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    }
  },
}

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    "MaxResults": {
      "target": "com.amazonaws.licensemanager#MaxSize100",
      "traits": {
        "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
      }
    },
    "traits": {
      "smithy.api#input": {}
    }
  },
  "com.amazonaws.licensemanager#ListReceivedGrantsResponse": {
    "type": "structure",
    "members": {
      "Grants": {
        "target": "com.amazonaws.licensemanager#GrantList",
        "traits": {
          "smithy.api#documentation": "<p>Received grant details.</p>"
        }
      },
      "NextToken": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Token for the next set of results.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#ListReceivedLicenses": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#ListReceivedLicensesRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#ListReceivedLicensesResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      }
    ]
  }
}

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    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Lists received licenses.</p>"
  }
},
"com.amazonaws.licensemanager#ListReceivedLicensesForOrganization":
{
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    }
  ]
}

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        "target": "com.amazonaws.licensemanager#ValidationException"
    }
],
"traits": {
    "smithy.api#documentation": "<p>Lists the licenses received for all accounts in the organization.</p>"
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest": {
    "type": "structure",
    "members": {
        "Filters": {
            "target": "com.amazonaws.licensemanager#FilterList",
            "traits": {
                "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n    <ul>\n        <li>\n            <p>\n                <code>Beneficiary</code>\n            </li>\n            <li>\n                <p>\n                    <code>ProductSKU</code>\n                </p>\n            </li>\n        </ul>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        },
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse": {
    "type": "structure",
    "members": {
        "Licenses": {
            "target": "com.amazonaws.licensemanager#GrantedLicenseList",
            "traits": {
                "smithy.api#documentation": "<p>Lists the licenses the organization has received.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {

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    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
  }
}
},
"traits": {
  "smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesRequest": {
  "type": "structure",
  "members": {
    "LicenseArns": {
      "target": "com.amazonaws.licensemanager#ArnList",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the licenses.</p>"
      }
    },
    "Filters": {
      "target": "com.amazonaws.licensemanager#FilterList",
      "traits": {
        "smithy.api#documentation": "<p>Filters to scope the results. The following filters are supported:</p>\n
        <ul>\n
        <li>\n
        <p>\n
        <code>ProductSKU</code>\n
        </li>\n
        <li>\n
        <p>\n
        <code>Status</code>\n
        </p>\n
        </li>\n
        <li>\n
        <p>\n
        <code>Fingerprint</code>\n
        </p>\n
        </li>\n
        <li>\n
        <p>\n
        <code>IssuerName</code>\n
        </p>\n
        </li>\n
        <li>\n
        <p>\n
        <code>Beneficiary</code>\n
        </p>\n
        </li>\n
        </ul>"
      }
    },
    "NextToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    },
    "MaxResults": {
      "target": "com.amazonaws.licensemanager#MaxSize100",
      "traits": {
        "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#ListReceivedLicensesResponse": {
  "type": "structure",

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"members": {
  "Licenses": {
    "target": "com.amazonaws.licensemanager#GrantedLicenseList",
    "traits": {
      "smithy.api#documentation": "<p>Received license details.</p>"
    }
  },

  "NextToken": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Token for the next set of results.</p>"
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#ListResourceInventory": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#ListResourceInventoryRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#ListResourceInventoryResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#FailedDependencyException"
    },
    {
      "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    }
  ]
}

```



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    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Lists resources managed using Systems Manager inventory.</p>"
  }
},
"com.amazonaws.licensemanager#ListResourceInventoryRequest": {
  "type": "structure",
  "members": {
    "MaxResults": {
      "target": "com.amazonaws.licensemanager#BoxInteger",
      "traits": {
        "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
      }
    },
    "NextToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    },
    "Filters": {
      "target": "com.amazonaws.licensemanager#InventoryFilterList",
      "traits": {
        "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical operators are supported:</p>
        <ul>
          <li><code>account_id</code> - The ID of the Amazon Web Services account that owns the resource. Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</li>
          <li><code>application_name</code> - The name of the application. Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>.</li>
          <li><code>license_included</code> - The type of license included. Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. Possible values are <code>sql-server-enterprise</code> | <code>sql-server-standard</code> | <code>sql-server-web</code> | <code>windows-server-datacenter</code>.</li>
          <li><code>platform</code> - The platform of the resource. Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>.</li>
          <li><code>resource_id</code> - The ID of the resource. Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</li>
          <li><code>tag:key</code> - The key/value combination of a tag assigned to the resource. Logical operators are <code>EQUALS</code> (single account) or <code>EQUALS</code> | <code>NOT_EQUALS</code> (cross account).</li>
        </ul>"
      }
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},

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"com.amazonaws.licensemanager#ListResourceInventoryResponse": {
  "type": "structure",
  "members": {
    "ResourceInventoryList": {
      "target": "com.amazonaws.licensemanager#ResourceInventoryList",
      "traits": {
        "smithy.api#documentation": "<p>Information
about the resources.</p>"
      }
    },
    "NextToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#ListTagsForResource": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#ListTagsForResourceRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#ListTagsForResourceResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Lists the tags for the specified license configuration.</p>"
  }
}

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    }
  },
  "com.amazonaws.licensemanager#ListTagsForResourceRequest": {
    "type": "structure",
    "members": {
      "ResourceArn": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
        }
      }
    },
    "traits": {
      "smithy.api#input": {}
    }
  },
  "com.amazonaws.licensemanager#ListTagsForResourceResponse": {
    "type": "structure",
    "members": {
      "Tags": {
        "target": "com.amazonaws.licensemanager#TagList",
        "traits": {
          "smithy.api#documentation": "<p>Information about the tags.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#ListTokens": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#ListTokensRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#ListTokensResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      }
    ]
  }
}

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    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Lists your tokens.</p>"
  }
},
"com.amazonaws.licensemanager#ListTokensRequest": {
  "type": "structure",
  "members": {
    "TokenIds": {
      "target": "com.amazonaws.licensemanager#StringList",
      "traits": {
        "smithy.api#documentation": "<p>Token IDs.</p>"
      }
    },
    "Filters": {
      "target": "com.amazonaws.licensemanager#FilterList",
      "traits": {
        "smithy.api#documentation": "<p>Filters to scope the results. The following filter is supported:</p>\n
<ul>\n  <li>\n    <p>\n      <code>LicenseArns</code>\n    </p>\n  </li>\n</ul>"
      }
    }
  },
  "NextToken": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Token for the next set of results.</p>"
    }
  },
  "MaxResults": {
    "target": "com.amazonaws.licensemanager#MaxSize100",
    "traits": {
      "smithy.api#documentation":
        "<p>Maximum number of results to return in a single call.</p>"
    }
  }
},
"traits": {

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    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#ListTokensResponse": {
  "type": "structure",
  "members": {
    "Tokens": {
      "target": "com.amazonaws.licensemanager#TokenList",
      "traits": {
        "smithy.api#documentation": "<p>Received token details.</p>"
      }
    },
    "NextToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#ListUsageForLicenseConfiguration":
{
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    }
  ],

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    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Lists all license usage records for a license configuration, displaying
license\n    consumption details by resource at a selected point in time. Use this action to audit the\n    current
license consumption for any license inventory and configuration.</p>"
  }
},
"com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest": {
  "type": "structure",
  "members": {
    "LicenseConfigurationArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
        "smithy.api#required": {}
      }
    },
    "MaxResults": {
      "target": "com.amazonaws.licensemanager#BoxInteger",
      "traits": {
        "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
      }
    },
    "NextToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    },
    "Filters": {
      "target": "com.amazonaws.licensemanager#Filters",
      "traits": {
        "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
operators\n    are supported:</p>\n    <ul>\n      <li>\n        <p>\n          <code>resourceArn</code> - The ARN of the license configuration resource.\n          Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n        </li>\n      <li>\n        <p>\n          <code>resourceType</code> - The resource type
(<code>EC2_INSTANCE</code> | <code>EC2_HOST</code> | <code>EC2_AMI</code> |
<code>SYSTEMS_MANAGER_MANAGED_INSTANCE</code>).\n          Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n        </li>\n      <li>\n        <p>\n          <code>resourceAccount</code> - The ID of the account that owns the resource. \n          Logical operators
are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n        </li>\n    </ul>"
      }
    }
  }
}

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    },
    "traits": {
      "smithy.api#input": {}
    }
  },
  "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse": {
    "type": "structure",
    "members": {
      "LicenseConfigurationUsageList": {
        "target": "com.amazonaws.licensemanager#LicenseConfigurationUsageList",
        "traits": {
          "smithy.api#documentation": "<p>Information about the license configurations.</p>"
        }
      },
      "NextToken": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Token for the next set of results.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#Location": {
    "type": "string"
  },
  "com.amazonaws.licensemanager#Long": {
    "type": "long"
  },
  "com.amazonaws.licensemanager#ManagedResourceSummary": {
    "type": "structure",
    "members": {
      "ResourceType":
    {
      "target": "com.amazonaws.licensemanager#ResourceType",
      "traits": {
        "smithy.api#documentation": "<p>Type of resource associated with a license.</p>"
      }
    },
      "AssociationCount": {
        "target": "com.amazonaws.licensemanager#BoxLong",
        "traits": {
          "smithy.api#documentation": "<p>Number of resources associated with licenses.</p>"
        }
      }
    }
  }
}

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    },
    "traits": {
      "smithy.api#documentation": "<p>Summary information about a managed resource.</p>"
    }
  },
  "com.amazonaws.licensemanager#ManagedResourceSummaryList": {
    "type": "list",
    "member": {
      "target": "com.amazonaws.licensemanager#ManagedResourceSummary"
    }
  },
  "com.amazonaws.licensemanager#MaxSize100": {
    "type": "integer",
    "traits": {
      "smithy.api#range": {
        "min": 1,
        "max": 100
      }
    }
  },
  "com.amazonaws.licensemanager#MaxSize3StringList": {
    "type": "list",
    "member": {
      "target": "com.amazonaws.licensemanager#String"
    },
    "traits": {
      "smithy.api#length": {
        "min": 0,
        "max": 3
      }
    }
  },
  "com.amazonaws.licensemanager#Message": {
    "type": "string"
  },
  "com.amazonaws.licensemanager#Metadata": {
    "type": "structure",
    "members": {
      "Name": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>The key name.</p>"
        }
      }
    }
  },
  "Value": {
    "target": "com.amazonaws.licensemanager#String",

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    "traits": {
      "smithy.api#documentation": "<p>The value.</p>"
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Describes key/value pairs.</p>"
  }
},
"com.amazonaws.licensemanager#MetadataList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#Metadata"
  }
},
"com.amazonaws.licensemanager#NoEntitlementsAllowedException": {
  "type": "structure",
  "members": {
    "Message": {
      "target": "com.amazonaws.licensemanager#Message"
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>There are no entitlements found for this license, or the entitlement
maximum count is reached.</p>",
    "smithy.api#error": "client",
    "smithy.api#httpError": 400
  }
},
"com.amazonaws.licensemanager#Options": {
  "type": "structure",
  "members": {
    "ActivationOverrideBehavior": {
      "target": "com.amazonaws.licensemanager#ActivationOverrideBehavior",
      "traits": {
        "smithy.api#documentation": "<p>An activation option for your grant that determines the behavior of
activating a grant.\n    Activation options can only be used with granted licenses sourced from the Amazon Web
Services Marketplace. Additionally, the operation must specify the value of <code>ACTIVE</code> for the\n
<code>Status</code> parameter.</p>\n    <ul>\n      <li>\n        <p>As a license administrator, you can
optionally specify an\n          <code>ActivationOverrideBehavior</code> when activating a grant.</p>\n
      </li>\n      <li>\n        <p>As a grantor, you can optionally specify an\n
<code>ActivationOverrideBehavior</code> when you activate a grant for a grantee\n          account in your
organization.</p>\n      </li>\n      <li>\n        <p>As a grantee, if the grantor creating the distributed
grant doesnt specify an\n          <code>ActivationOverrideBehavior</code>, you can optionally specify one
when you\n          are activating the grant.</p>\n      </li>\n    </ul>\n    <dl>\n
<dt>DISTRIBUTED_GRANTS_ONLY</dt>\n      <dd>\n        <p>Use this value to activate a grant
without replacing any member accounts\n          active grants for the same product.</p>\n      </dd>\n
<dt>ALL_GRANTS_PERMITTED_BY_ISSUER</dt>\n      <dd>\n        <p>Use this value to activate a

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grant and disable other active grants in any\n          member accounts
for the same product. This action will also replace their\n          previously activated grants with this activated
grant.</p>\n          </dd>\n          </dl>"
    }
  }
},
"traits": {
  "smithy.api#documentation": "<p>The options you can specify when you create a new version of a grant,
such as activation\n          override behavior. For more information, see <a
href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-licenses.html\">Granted licenses in
License Manager</a> in the <i>License Manager User Guide</i>.</p>"
  }
},
"com.amazonaws.licensemanager#OrganizationConfiguration": {
  "type": "structure",
  "members": {
    "EnableIntegration": {
      "target": "com.amazonaws.licensemanager#Boolean",
      "traits": {
        "smithy.api#default": false,
        "smithy.api#documentation":
"<p>Enables Organizations integration.</p>",
        "smithy.api#required": {}
      }
    }
  }
},
"traits": {
  "smithy.api#documentation": "<p>Configuration information for Organizations.</p>"
}
},
"com.amazonaws.licensemanager#PrincipalArnList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#Arn"
  },
  "traits": {
    "smithy.api#length": {
      "min": 1,
      "max": 1
    }
  }
},
"com.amazonaws.licensemanager#ProductInformation": {
  "type": "structure",
  "members": {
    "ResourceType": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {

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    "smithy.api#documentation": "<p>Resource type. The
possible values are <code>SSM_MANAGED</code> | <code>RDS</code>.</p>",
    "smithy.api#required": {}
  }
},
"ProductInformationFilterList": {
  "target": "com.amazonaws.licensemanager#ProductInformationFilterList",
  "traits": {
    "smithy.api#documentation": "<p>A Product information filter consists of a
<code>ProductInformationFilterComparator</code> which is a logical operator, a
<code>ProductInformationFilterName</code> which specifies the type of filter being declared, and a
<code>ProductInformationFilterValue</code> that specifies the value to filter on. </p>\n    <p>Accepted values
for <code>ProductInformationFilterName</code> are listed here along with descriptions and valid options for
<code>ProductInformationFilterComparator</code>. </p>\n    <p>The following filters and are supported when
the resource type \n    is <code>SSM_MANAGED</code>:</p>\n
    <ul>\n      <li>\n        <p>\n          <code>Application Name</code> - The name of the
application.\n          Logical operator is <code>EQUALS</code>.</p>\n        </li>\n      <li>\n        <p>\n          <code>Application Publisher</code> - The publisher of the application.\n          Logical
operator is <code>EQUALS</code>.</p>\n        </li>\n      <li>\n        <p>\n          <code>Application Version</code> - The version of the application.\n          Logical operator is
<code>EQUALS</code>.</p>\n        </li>\n      <li>\n        <p>\n          <code>Platform
Name</code> - The name of the platform.\n          Logical operator is <code>EQUALS</code>.</p>\n        </li>\n      <li>\n        <p>\n          <code>Platform Type</code> - The platform type.\n          Logical operator is <code>EQUALS</code>.</p>\n        </li>\n      <li>\n        <p>\n          <code>Tag:key</code> - The key of a tag attached to an
Amazon Web Services resource you wish to exclude from automated discovery. Logical operator is
<code>NOT_EQUALS</code>. The key for your tag must be appended to <code>Tag:</code> following the
example: <code>Tag:name-of-your-key</code>. <code>ProductInformationFilterValue</code> is optional if you
are not using values for the key.\n        </p>\n        </li>\n      <li>\n        <p>\n          <code>AccountId</code> - The 12-digit ID of an Amazon Web Services account you wish to exclude from
automated discovery.\n          Logical operator is <code>NOT_EQUALS</code>.</p>\n        </li>\n      <li>\n        <p>\n          <code>License Included</code> - The type of license included.\n          Logical
operators are <code>EQUALS</code> and <code>NOT_EQUALS</code>.\n          Possible values are:
<code>sql-server-enterprise</code> | \n          <code>sql-server-standard</code> | \n          <code>sql-server-
web</code> | \n          <code>windows-server-datacenter</code>.</p>\n        </li>\n    </ul>\n    <p>The following filters and logical operators are supported when the resource type\n    is
<code>RDS</code>:</p>\n    <ul>\n      <li>\n        <p>\n          <code>Engine Edition</code> -
The edition of the database engine.\n          Logical operator is <code>EQUALS</code>.\n          Possible
values are: <code>oracle-ee</code> | <code>oracle-se</code> | <code>oracle-se1</code> | <code>oracle-
se2</code>.</p>\n        </li>\n      <li>\n        <p>\n          <code>License Pack</code> - The license
pack.\n          Logical operator is <code>EQUALS</code>.\n          Possible values are: <code>data
guard</code> | \n          <code>diagnostic pack sqlt</code> | \n          <code>tuning pack sqlt</code> | \n          <code>ols</code> | \n          <code>olap</code>.</p>\n        </li>\n    </ul>",
    "smithy.api#required": {}
  }
}
},

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    "traits": {
      "smithy.api#documentation": "<p>Describes product information for a license configuration.</p>"
    }
  },
  "com.amazonaws.licensemanager#ProductInformationFilter": {
    "type": "structure",
    "members": {
      "ProductInformationFilterName": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Filter name.</p>",
          "smithy.api#required": {}
        }
      },
      "ProductInformationFilterValue": {
        "target": "com.amazonaws.licensemanager#StringList",

        "traits": {
          "smithy.api#documentation": "<p>Filter value.</p>"
        }
      },
      "ProductInformationFilterComparator": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Logical operator.</p>",
          "smithy.api#required": {}
        }
      }
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Describes product information filters.</p>"
  }
},
"com.amazonaws.licensemanager#ProductInformationFilterList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#ProductInformationFilter"
  }
},
"com.amazonaws.licensemanager#ProductInformationList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#ProductInformation"
  }
},
"com.amazonaws.licensemanager#ProvisionalConfiguration": {
  "type": "structure",
  "members": {

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    "MaxTimeToLiveInMinutes": {
      "target": "com.amazonaws.licensemanager#BoxInteger",
      "traits": {
        "smithy.api#documentation": "<p>Maximum time for the provisional configuration, in minutes.</p>",
        "smithy.api#required": {}
      }
    },
    "traits": {
      "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
    }
  },
  "com.amazonaws.licensemanager#RateLimitExceededException": {
    "type": "structure",
    "members": {
      "Message": {
        "target": "com.amazonaws.licensemanager#Message"
      }
    },
    "traits": {
      "aws.protocols#awsQueryError": {
        "code": "RateLimitExceeded",
        "httpResponseCode": 429
      },
      "smithy.api#documentation": "<p>Too many requests have been submitted. Try again after a brief
wait.</p>",
      "smithy.api#error": "client",
      "smithy.api#httpError": 429
    }
  },
  "com.amazonaws.licensemanager#ReceivedMetadata": {
    "type": "structure",
    "members": {
      "ReceivedStatus": {
        "target": "com.amazonaws.licensemanager#ReceivedStatus",
        "traits": {
          "smithy.api#documentation": "<p>Received status.</p>"
        }
      },
      "ReceivedStatusReason": {
        "target": "com.amazonaws.licensemanager#StatusReasonMessage",
        "traits": {
          "smithy.api#documentation": "<p>Received
status reason.</p>"
        }
      }
    },
    "AllowedOperations": {
      "target": "com.amazonaws.licensemanager#AllowedOperationList",

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```

    "traits": {
      "smithy.api#documentation": "<p>Allowed operations.</p>"
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Metadata associated with received licenses and grants.</p>"
  }
},
"com.amazonaws.licensemanager#ReceivedStatus": {
  "type": "enum",
  "members": {
    "PENDING_WORKFLOW": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "PENDING_WORKFLOW"
      }
    },
    "PENDING_ACCEPT": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue":
"PENDING_ACCEPT"
      }
    },
    "REJECTED": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "REJECTED"
      }
    },
    "ACTIVE": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "ACTIVE"
      }
    },
    "FAILED_WORKFLOW": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "FAILED_WORKFLOW"
      }
    },
    "DELETED": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "DELETED"
      }
    }
  }
}

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    },
    "DISABLED": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "DISABLED"
      }
    },
    "WORKFLOW_COMPLETED": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "WORKFLOW_COMPLETED"
      }
    }
  }
},
"com.amazonaws.licensemanager#RedirectException": {
  "type": "structure",
  "members": {
    "Location": {
      "target": "com.amazonaws.licensemanager#Location",
      "traits": {
        "smithy.api#httpHeader": "Location"
      }
    },
    "Message": {
      "target": "com.amazonaws.licensemanager#Message"
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>This is not the correct Region for the resource. Try again.</p>",
    "smithy.api#error": "client",
    "smithy.api#httpError": 308
  }
},
"com.amazonaws.licensemanager#RejectGrant": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#RejectGrantRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#RejectGrantResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    }
  ]
}

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    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target":
"com.amazonaws.licensemanager#ResourceLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Rejects the specified grant.</p>"
  }
},
"com.amazonaws.licensemanager#RejectGrantRequest": {
  "type": "structure",
  "members": {
    "GrantArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
        "smithy.api#required": {}
      }
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
}
},
"com.amazonaws.licensemanager#RejectGrantResponse": {
  "type": "structure",
  "members": {
    "GrantArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>Grant ARN.</p>"
      }
    }
  },
  "Status": {

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        "target": "com.amazonaws.licensemanager#GrantStatus",
        "traits": {
            "smithy.api#documentation": "<p>Grant status.</p>"
        }
    },
    "Version": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
            "smithy.api#documentation": "<p>Grant version.</p>"
        }
    }
},
"traits": {
    "smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#RenewType":
{
    "type": "enum",
    "members": {
        "NONE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "None"
            }
        },
        "WEEKLY": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Weekly"
            }
        },
        "MONTHLY": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Monthly"
            }
        }
    }
},
"com.amazonaws.licensemanager#ReportContext": {
    "type": "structure",
    "members": {
        "licenseConfigurationArns": {
            "target": "com.amazonaws.licensemanager#ArnList",
            "traits": {

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    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration that this
generator reports on.</p>",
    "smithy.api#required": {}
  }
},
"traits": {
  "smithy.api#documentation": "<p>Details of the license configuration that this generator reports on.</p>"
}
},
"com.amazonaws.licensemanager#ReportFrequency": {
  "type": "structure",
  "members": {
    "value": {
      "target": "com.amazonaws.licensemanager#Integer",
      "traits": {
        "smithy.api#documentation": "<p>Number of times within the frequency period that a report is
generated. \n    The only supported value is <code>1</code>.</p>"
      }
    },
    "period": {
      "target": "com.amazonaws.licensemanager#ReportFrequencyType",

      "traits": {
        "smithy.api#documentation": "<p>Time period between each report. The period can be daily, weekly,
or monthly.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Details about how frequently reports are generated.</p>"
  }
},
"com.amazonaws.licensemanager#ReportFrequencyType": {
  "type": "enum",
  "members": {
    "DAY": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "DAY"
      }
    },
    "WEEK": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "WEEK"
      }
    }
  },
}

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    "MONTH": {
      "target": "smithy.api#Unit",
      "traits":
    {
      "smithy.api#enumValue": "MONTH"
    }
  }
},
"com.amazonaws.licensemanager#ReportGenerator": {
  "type": "structure",
  "members": {
    "ReportGeneratorName": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Name of the report generator.</p>"
      }
    },
    "ReportType": {
      "target": "com.amazonaws.licensemanager#ReportTypeList",
      "traits": {
        "smithy.api#documentation": "<p>Type of reports that are generated.</p>"
      }
    },
    "ReportContext": {
      "target": "com.amazonaws.licensemanager#ReportContext",
      "traits": {
        "smithy.api#documentation": "<p>License
configuration type for this generator.</p>"
      }
    },
    "ReportFrequency": {
      "target": "com.amazonaws.licensemanager#ReportFrequency",
      "traits": {
        "smithy.api#documentation": "<p>Details about how frequently reports are generated.</p>"
      }
    },
    "LicenseManagerReportGeneratorArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator.</p>"
      }
    },
    "LastRunStatus": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Status of the last report generation attempt.</p>"
      }
    }
  }
}

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    },
    "LastRunFailureReason":
  {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Failure message for the last report generation attempt.</p>"
    }
  },
  "LastReportGenerationTime": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Time the last report was generated at.</p>"
    }
  },
  "ReportCreatorAccount": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>The Amazon Web Services account ID used to create the report
generator.</p>"
    }
  },
  "Description": {
    "target": "com.amazonaws.licensemanager#String",

    "traits": {
      "smithy.api#documentation": "<p>Description of the report generator.</p>"
    }
  },
  "S3Location": {
    "target": "com.amazonaws.licensemanager#S3Location",
    "traits": {
      "smithy.api#documentation": "<p>Details of the S3 bucket that report generator reports are published
to.</p>"
    }
  },
  "CreateTime": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Time the report was created.</p>"
    }
  },
  "Tags": {
    "target": "com.amazonaws.licensemanager#TagList",
    "traits": {
      "smithy.api#documentation": "<p>Tags associated with the report generator.</p>"
    }
  }
}

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}
},
"traits": {
  "smithy.api#documentation": "<p>Describe the details of a report generator.</p>"
}
},
"com.amazonaws.licensemanager#ReportGeneratorList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#ReportGenerator"
  }
},
"com.amazonaws.licensemanager#ReportGeneratorName": {
  "type": "string",
  "traits": {
    "smithy.api#length": {
      "min": 1,
      "max": 100
    }
  }
},
"com.amazonaws.licensemanager#ReportType": {
  "type": "enum",
  "members": {
    "LICENSE_CONFIGURATION_SUMMARY_REPORT": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "LicenseConfigurationSummaryReport"
      }
    }
  }
},
"LICENSE_CONFIGURATION_USAGE_REPORT": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "LicenseConfigurationUsageReport"
  }
}
},
"com.amazonaws.licensemanager#ReportTypeList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#ReportType"
  }
},
"com.amazonaws.licensemanager#ResourceInventory": {
  "type": "structure",
  "members": {

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"ResourceId": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>ID of the resource.</p>"
  }
},
"ResourceType": {
  "target": "com.amazonaws.licensemanager#ResourceType",
  "traits": {
    "smithy.api#documentation": "<p>Type of resource.</p>"
  }
},
"ResourceArn": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
  }
},
"Platform": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Platform of the resource.</p>"
  }
},
"PlatformVersion": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Platform version of the resource in the inventory.</p>"
  }
},
"ResourceOwningAccountId": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>ID of the account that owns the resource.</p>"
  }
},
"traits": {
  "smithy.api#documentation": "<p>Details about a resource.</p>"
}
},
"com.amazonaws.licensemanager#ResourceInventoryList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#ResourceInventory"
  }
}

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},
"com.amazonaws.licensemanager#ResourceLimitExceededException": {
  "type": "structure",
  "members": {
    "Message": {
      "target": "com.amazonaws.licensemanager#Message"
    }
  },
  "traits": {
    "aws.protocols#awsQueryError": {
      "code": "ResourceLimitExceeded",

      "httpResponseCode": 400
    },
    "smithy.api#documentation": "<p>Your resource limits have been exceeded.</p>",
    "smithy.api#error": "client",
    "smithy.api#httpError": 400
  }
},
"com.amazonaws.licensemanager#ResourceNotFoundException": {
  "type": "structure",
  "members": {
    "Message": {
      "target": "com.amazonaws.licensemanager#Message"
    }
  },
  "traits": {
    "aws.protocols#awsQueryError": {
      "code": "InvalidResource.NotFound",
      "httpResponseCode": 400
    },
    "smithy.api#documentation": "<p>The resource cannot be found.</p>",
    "smithy.api#error": "client",
    "smithy.api#httpError": 400
  }
},
"com.amazonaws.licensemanager#ResourceType": {
  "type": "enum",
  "members": {
    "EC2_INSTANCE": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "EC2_INSTANCE"
      }
    },
    "EC2_HOST": {
      "target": "smithy.api#Unit",
      "traits": {

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        "smithy.api#enumValue": "EC2_HOST"
    }
},
"EC2_AMI": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "EC2_AMI"
    }
},
"RDS": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "RDS"
    }
},
"SYSTEMS_MANAGER_MANAGED_INSTANCE": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "SYSTEMS_MANAGER_MANAGED_INSTANCE"
    }
}
},
"com.amazonaws.licensemanager#S3Location": {
    "type": "structure",
    "members": {
        "bucket": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Name of the S3 bucket reports are published to.</p>"
            }
        },
        "keyPrefix": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Prefix of the S3 bucket reports are published to.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Details of the S3 bucket that report generator reports are published to.</p>"
    }
},
"com.amazonaws.licensemanager#ServerInternalException": {
    "type": "structure",
    "members": {
        "Message": {

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        "target": "com.amazonaws.licensemanager#Message"
    }
},
"traits": {
    "aws.protocols#awsQueryError": {
        "code": "InternalServerError",
        "httpResponseCode": 500
    },
    "smithy.api#documentation": "<p>The server experienced an internal error. Try again.</p>",
    "smithy.api#error": "server",
    "smithy.api#httpError": 500
}
},
"com.amazonaws.licensemanager#SignedToken": {
    "type": "string",
    "traits": {
        "smithy.api#length": {
            "min": 4096
        }
    }
},
"com.amazonaws.licensemanager#StatusReasonMessage": {
    "type": "string",
    "traits":
{
    "smithy.api#length": {
        "min": 0,
        "max": 400
    },
    "smithy.api#pattern": "^[\\s\\S]+$"
}
},
"com.amazonaws.licensemanager#String": {
    "type": "string"
},
"com.amazonaws.licensemanager#StringList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#String"
    }
},
"com.amazonaws.licensemanager#Tag": {
    "type": "structure",
    "members": {
        "Key": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Tag key.</p>"
            }
        }
    }
}

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    }
  },
  "Value": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation":
"<p>Tag value.</p>"
    }
  }
},
"traits": {
  "smithy.api#documentation": "<p>Details about a tag for a license configuration.</p>"
}
},
"com.amazonaws.licensemanager#TagKeyList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#String"
  }
},
"com.amazonaws.licensemanager#TagList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#Tag"
  }
},
"com.amazonaws.licensemanager#TagResource": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#TagResourceRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#TagResourceResponse"
  },
  "errors": [
    {
      "target":
"com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    }
  ]
}

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    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Adds the specified tags to the specified license configuration.</p>"
  }
},
"com.amazonaws.licensemanager#TagResourceRequest": {
  "type": "structure",
  "members": {
    "ResourceArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits":
    {
      "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
      "smithy.api#required": {}
    }
  },
  "Tags": {
    "target": "com.amazonaws.licensemanager#TagList",
    "traits": {
      "smithy.api#documentation": "<p>One or more tags.</p>",
      "smithy.api#required": {}
    }
  }
},
"traits": {
  "smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#TagResourceResponse": {
  "type": "structure",
  "members": {},
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#TokenData": {
  "type": "structure",
  "members": {
    "TokenId": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Token ID.</p>"
      }
    }
  },
},

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"TokenType": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Type of token generated. The supported value is
<code>REFRESH_TOKEN</code>.</p>"
  }
},
"LicenseArn": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
  }
},
"ExpirationTime": {
  "target": "com.amazonaws.licensemanager#ISO8601DateTime",
  "traits": {
    "smithy.api#documentation": "<p>Token expiration time, in ISO8601-UTC
format.</p>"
  }
},
"TokenProperties": {
  "target": "com.amazonaws.licensemanager#MaxSize3StringList",
  "traits": {
    "smithy.api#documentation": "<p>Data specified by the caller.</p>"
  }
},
"RoleArns": {
  "target": "com.amazonaws.licensemanager#ArnList",
  "traits": {
    "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the roles included in the
token.</p>"
  }
},
"Status": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Token status. The possible values are
<code>AVAILABLE</code> and <code>DELETED</code>.</p>"
  }
},
"traits": {
  "smithy.api#documentation": "<p>Describes a token.</p>"
}
},
"com.amazonaws.licensemanager#TokenList": {
  "type": "list",

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    "member": {
      "target": "com.amazonaws.licensemanager#TokenData"
    }
  },
  "com.amazonaws.licensemanager#TokenString": {
    "type": "string",
    "traits": {
      "smithy.api#length": {
        "min": 0,
        "max": 4096
      },
      "smithy.api#pattern": "^\\S+$"
    }
  },
  "com.amazonaws.licensemanager#TokenType": {
    "type": "enum",
    "members": {
      "REFRESH_TOKEN": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "REFRESH_TOKEN"
        }
      }
    }
  },
  "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException":
  {
    "type": "structure",
    "members": {
      "Message": {
        "target": "com.amazonaws.licensemanager#Message"
      }
    },
    "traits": {
      "smithy.api#documentation": "<p>The digital signature method is unsupported. Try your request
again.</p>",
      "smithy.api#error": "client",
      "smithy.api#httpError": 400
    }
  },
  "com.amazonaws.licensemanager#UntagResource": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#UntagResourceRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#UntagResourceResponse"
    }
  },

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"errors": [
  {
    "target": "com.amazonaws.licensemanager#AccessDeniedException"
  },
  {
    "target": "com.amazonaws.licensemanager#AuthorizationException"
  },
  {
    "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
  },
  {
    "target": "com.amazonaws.licensemanager#RateLimitExceededException"
  },
  {
    "target": "com.amazonaws.licensemanager#ServerInternalException"
  }
],
"traits": {
  "smithy.api#documentation": "<p>Removes the specified tags from the specified license
configuration.</p>"
}
},
"com.amazonaws.licensemanager#UntagResourceRequest": {
  "type": "structure",
  "members": {
    "ResourceArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
        "smithy.api#required": {}
      }
    },
    "TagKeys": {
      "target": "com.amazonaws.licensemanager#TagKeyList",
      "traits": {
        "smithy.api#documentation": "<p>Keys identifying the tags to remove.</p>",
        "smithy.api#required": {}
      }
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#UntagResourceResponse": {
  "type": "structure",
  "members": {},

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    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#UpdateLicenseConfiguration": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
      }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Modifies the attributes of an existing license configuration.</p>"
    }
  },
  "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest": {
    "type": "structure",
    "members": {
      "LicenseConfigurationArn": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>",
          "smithy.api#required": {}
        }
      },
    },
  },

```

```

"LicenseConfigurationStatus": {
  "target": "com.amazonaws.licensemanager#LicenseConfigurationStatus",
  "traits": {
    "smithy.api#documentation": "<p>New status of the license configuration.</p>"
  }
},
"LicenseRules": {
  "target": "com.amazonaws.licensemanager#StringList",
  "traits": {
    "smithy.api#documentation": "<p>New license rule. The only rule that you can add after you create a license\n
configuration is licenseAffinityToHost.</p>"
  }
},
"LicenseCount": {
  "target": "com.amazonaws.licensemanager#BoxLong",
  "traits": {
    "smithy.api#documentation": "<p>New number of licenses managed by the license
configuration.</p>"
  }
},
"LicenseCountHardLimit": {
  "target": "com.amazonaws.licensemanager#BoxBoolean",
  "traits": {
    "smithy.api#documentation": "<p>New hard limit of the number of available licenses.</p>"
  }
},
"Name": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>New name
of the license configuration.</p>"
  }
},
"Description": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>New description of the license configuration.</p>"
  }
},
"ProductInformationList": {
  "target": "com.amazonaws.licensemanager#ProductInformationList",
  "traits": {
    "smithy.api#documentation": "<p>New product information.</p>"
  }
},
"DisassociateWhenNotFound": {
  "target": "com.amazonaws.licensemanager#BoxBoolean",

```



```

        "traits": {
            "smithy.api#documentation": "<p>When true, disassociates a resource when software is
uninstalled.</p>"
        }
    },
    "traits":
{
    "smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse": {
    "type": "structure",
    "members": {},
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
    ],
}

```

```

    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Updates a report generator.</p>\n    <p>After you make changes to a report generator, it starts generating new reports within 60 minutes of being updated.</p>"
  }
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest":
{
  "type": "structure",
  "members": {
    "LicenseManagerReportGeneratorArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator to update.</p>",
        "smithy.api#required": {}
      }
    },
    "ReportGeneratorName": {
      "target": "com.amazonaws.licensemanager#ReportGeneratorName",
      "traits": {
        "smithy.api#documentation": "<p>Name of the report generator.</p>",
        "smithy.api#required": {}
      }
    },
    "Type": {
      "target": "com.amazonaws.licensemanager#ReportTypeList",
      "traits": {
        "smithy.api#documentation":
          "<p>Type of reports to generate. The following report types are supported:</p>\n    <ul>\n      <li>\n        <p>License configuration report - Reports the number and details of consumed licenses for a license configuration.</p>\n      </li>\n      <li>\n        <p>Resource report - Reports the tracked licenses and resource consumption for a license configuration.</p>\n      </li>\n    </ul>",
        "smithy.api#required": {}
      }
    },
    "ReportContext": {
      "target": "com.amazonaws.licensemanager#ReportContext",
      "traits": {
        "smithy.api#documentation": "<p>The report context.</p>",
        "smithy.api#required": {}
      }
    },
    "ReportFrequency": {
      "target": "com.amazonaws.licensemanager#ReportFrequency",

```

```

    "traits":
  {
    "smithy.api#documentation": "<p>Frequency by which reports are generated.</p>",
    "smithy.api#required": {}
  }
},
"ClientToken": {
  "target": "com.amazonaws.licensemanager#ClientRequestToken",
  "traits": {
    "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",
    "smithy.api#required": {}
  }
},
"Description": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Description of the report generator.</p>"
  }
}
},
"traits": {
  "smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse":
{
  "type": "structure",
  "members": {},
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    }
  ],

```

```

    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidResourceStateException"
    },
    {
      "target": "com.amazonaws.licensemanager#LicenseUsageException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Adds or removes the specified license configurations for the specified Amazon Web Services resource.</p>\n    <p>You can update the license specifications of AMIs, instances, and hosts.\n    You cannot update the license specifications for launch templates and CloudFormation templates, \n    as they send license configurations to the operation that creates the resource.</p>"
  }
},

"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest": {
  "type": "structure",
  "members": {
    "ResourceArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon Web Services resource.</p>",
        "smithy.api#required": {}
      }
    },
    "AddLicenseSpecifications": {
      "target": "com.amazonaws.licensemanager#LicenseSpecifications",
      "traits": {
        "smithy.api#documentation": "<p>ARNs of the license configurations to add.</p>"
      }
    },
    "RemoveLicenseSpecifications": {
      "target": "com.amazonaws.licensemanager#LicenseSpecifications",
      "traits": {
        "smithy.api#documentation":
"<p>ARNs of the license configurations to remove.</p>"
      }
    }
  }
}

```

```

    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse": {
  "type": "structure",
  "members": {},
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#UpdateServiceSettings": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#UpdateServiceSettingsRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#UpdateServiceSettingsResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Updates License Manager settings for the current Region.</p>"
  }
},
"com.amazonaws.licensemanager#UpdateServiceSettingsRequest": {
  "type": "structure",
  "members": {
    "S3BucketArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {

```

```

    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon S3 bucket where
the License
Manager information is stored.</p>"
  }
},
"SnsTopicArn": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon SNS topic used
for License Manager alerts.</p>"
  }
},
"OrganizationConfiguration": {
  "target": "com.amazonaws.licensemanager#OrganizationConfiguration",
  "traits": {
    "smithy.api#documentation": "<p>Enables integration with Organizations for cross-account
discovery.</p>"
  }
},
"EnableCrossAccountsDiscovery": {
  "target": "com.amazonaws.licensemanager#BoxBoolean",
  "traits": {
    "smithy.api#documentation": "<p>Activates cross-account discovery.</p>"
  }
}
}
},
"traits": {
  "smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateServiceSettingsResponse": {
  "type": "structure",
  "members": {},
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#UsageOperation": {
  "type": "string",
  "traits": {
    "smithy.api#length": {
      "min": 0,
      "max": 50
    }
  }
},
"com.amazonaws.licensemanager#ValidationException": {

```



```

// Amazon Resource Name (ARN) of the license.
//
// This member is required.
LicenseArn *string

// Current version
of the license.
//
// This member is required.
SourceVersion *string

noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

// Date when the license is deleted.
DeletionDate *string

// License status.
Status types.LicenseDeletionStatus

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
if err := stack.Serialize.Add(&setOperationInputMiddleware{ }, middleware.After); err != nil {
return err
}
err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{ }, middleware.After)
if err != nil {
return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{ }, middleware.After)
if err != nil {
return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addLegacyEndpointContextSetter(stack,
options); err != nil {
return err
}

```



```

}
if err = addSetLoggerMiddleware(stack, options); err != nil {
    return err
}
if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
    return err
}
if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
    return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
    return err
}
if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
    return err
}
if err = addRetryMiddlewares(stack, options); err != nil {
    return err
}
if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
    return err
}
if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
    return err
}
if err = addClientUserAgent(stack, options); err != nil {
    return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if
err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
    return err
}
if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
    return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
    return err
}
if err = awsmiddleware.AddRecursionDetection(stack); err != nil {
    return err
}
}

```

```

if err = addRequestIDRetrieverMiddleware(stack); err != nil {
    return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
    return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
    return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
    return err
}
return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
return &awsmiddleware.RegisterServiceMetadata{
    Region:    region,
    ServiceID: ServiceID,
    OperationName: "DeleteLicense",
}
}

```

# 1.336 aws-aws-sdk-go-v2-service-internal-checksum 1.3.17

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# 1.337 aws-aws-sdk-go-v2-service-internal-s3shared 1.17.15

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# 1.338 aws-aws-sdk-go-v2-service-s3 1.58.2

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# 1.339 aws-aws-sdk-go-v2-internal-v4a 1.3.15

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# 1.346 genproto-googleapis-api 0.0.0- 20240725223205-93522f1f2a9f

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# 1.348 aws-aws-sdk-go-v2-feature-s3-manager

## 1.17.9

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Python was created in the early 1990s by Guido van Rossum at Stichting Mathematisch Centrum (CWI, see <https://www.cwi.nl>) in the Netherlands as a successor of a language called ABC. Guido remains Python's principal author, although it includes many contributions from others.

In 1995, Guido continued his work on Python at the Corporation for National Research Initiatives (CNRI, see <https://www.cnri.reston.va.us>) in Reston, Virginia where he released several versions of the software.

In May 2000, Guido and the Python core development team moved to BeOpen.com to form the BeOpen PythonLabs team. In October of the same year, the PythonLabs team moved to Digital Creations, which became Zope Corporation. In 2001, the Python Software Foundation (PSF, see <https://www.python.org/psf/>) was formed, a non-profit organization created specifically to own Python-related Intellectual Property. Zope Corporation was a sponsoring member of the PSF.

All

Python releases are Open Source (see <https://opensource.org> for the Open Source Definition). Historically, most, but not all, Python releases have also been GPL-compatible; the table below summarizes the various releases.

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1.3 thru 1.5.2	1.2	1995-1999	CNRI	yes
1.6	1.5.2	2000	CNRI	no
2.0	1.6	2000	BeOpen.com	no
1.6.1	1.6	2001	CNRI	yes (2)
2.1	2.0+1.6.1	2001	PSF	no

2.0.1	2.0+1.6.1	2001	PSF	yes
2.1.1	2.1+2.0.1	2001	PSF	yes
2.1.2	2.1.1	2002	PSF	yes
2.1.3	2.1.2	2002	PSF	yes
2.2 and above	2.1.1	2001-now	PSF	yes

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## 1.355 logrus 1.9.3

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