



Cisco Smart Account and Smart Licensing

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Agenda

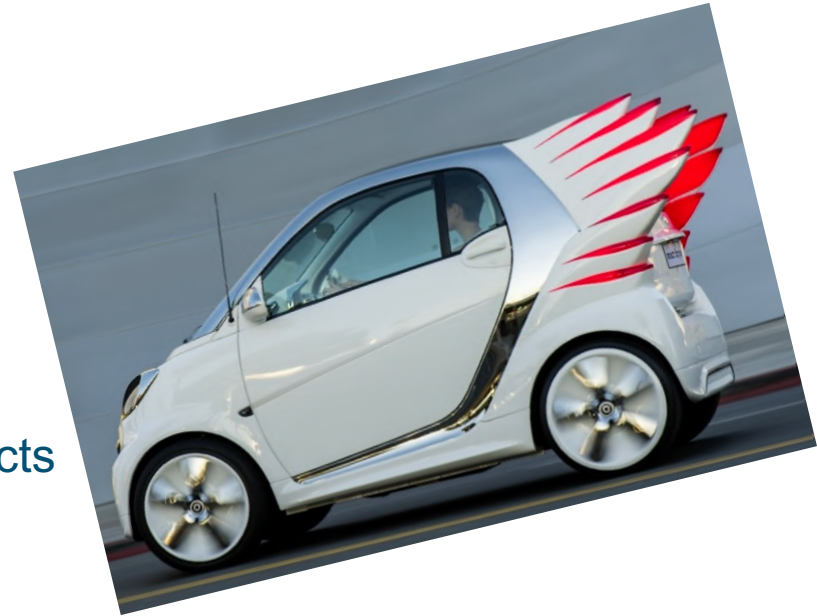
1 Overview – Smart Account, Smart licensing

2 How to structure Smart Account

3 Smart License Enabled Products

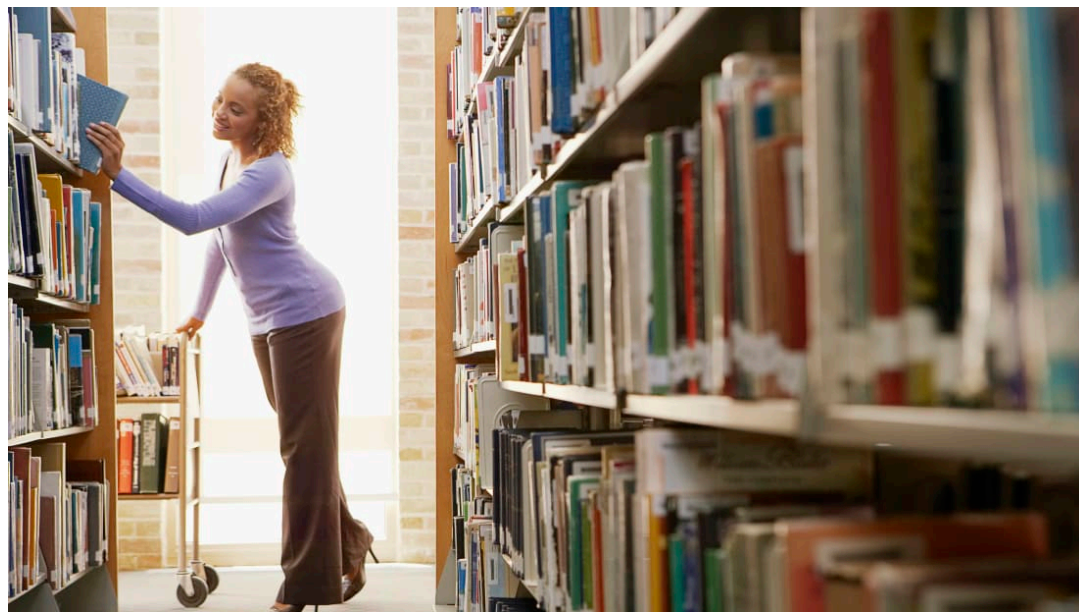
4 DEMO

5 Deploying Smart License Enabled Products



***Pokrok nedosiahneme bez zmeny,
a tí, ktorí nedokážu zmeniť svoje myslenie,
nedokážu zmeniť nič.***

George Bernard Shaw



Smart Licensing is Different

Classic Licenses



Limited View

Customers do not know what they own.



PAK Registration

Manually register each device.



Device-Specific

Licenses are specific to only one device.



Smart Licenses



Complete View

Software, services, and devices in easy-to-use portal.



Easy Registration

No PAKs. Easy activation. Ready to use.



Company-Specific

Flexible licensing. Use across devices.

Automated Provisioning | Efficient Consumption | License Portability

What is not a Smart Account



What it is

- A Cisco.com service to organize your assets in a central location.
- Leveraged by multiple portals to enable your experience.



Type of License >

PAK Licenses

Use this tool >

License
Registration Portal
LRP

At software.cisco.com click >

Traditional Licensing



What it is NOT

- Only for Cisco ONE
- Only for Smart Licensing
- Only for Enterprise License Agreements

Smart /
Hybrid Licenses

Cisco Smart
Software manager
CSSM

Smart Software Licensing

Enterprise Agreement

EA Workspace

Enterprise Agreements

Creating a Smart Account

Proactive Creation

Allows for the Partner or Customer to set up a Smart Account Outside of an order, either to receive future orders or to organize existing licenses



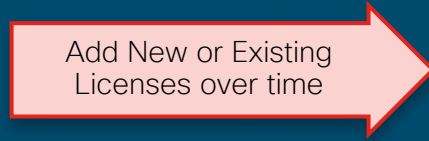
Software.
cisco.com



Begin Smart Account
Creation Process



Customer Approval
of New Account



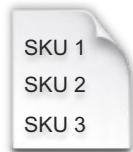
Licenses Available
for Customer Use

While Placing an Order

Allows for a Partner to Create (or Select) a Smart Account for Use while Placing an Order



Commerce
(CCW)



Create BoM



Search for Smart
Account and **Create
New Account** if Needed



Customer Approval
of New Account



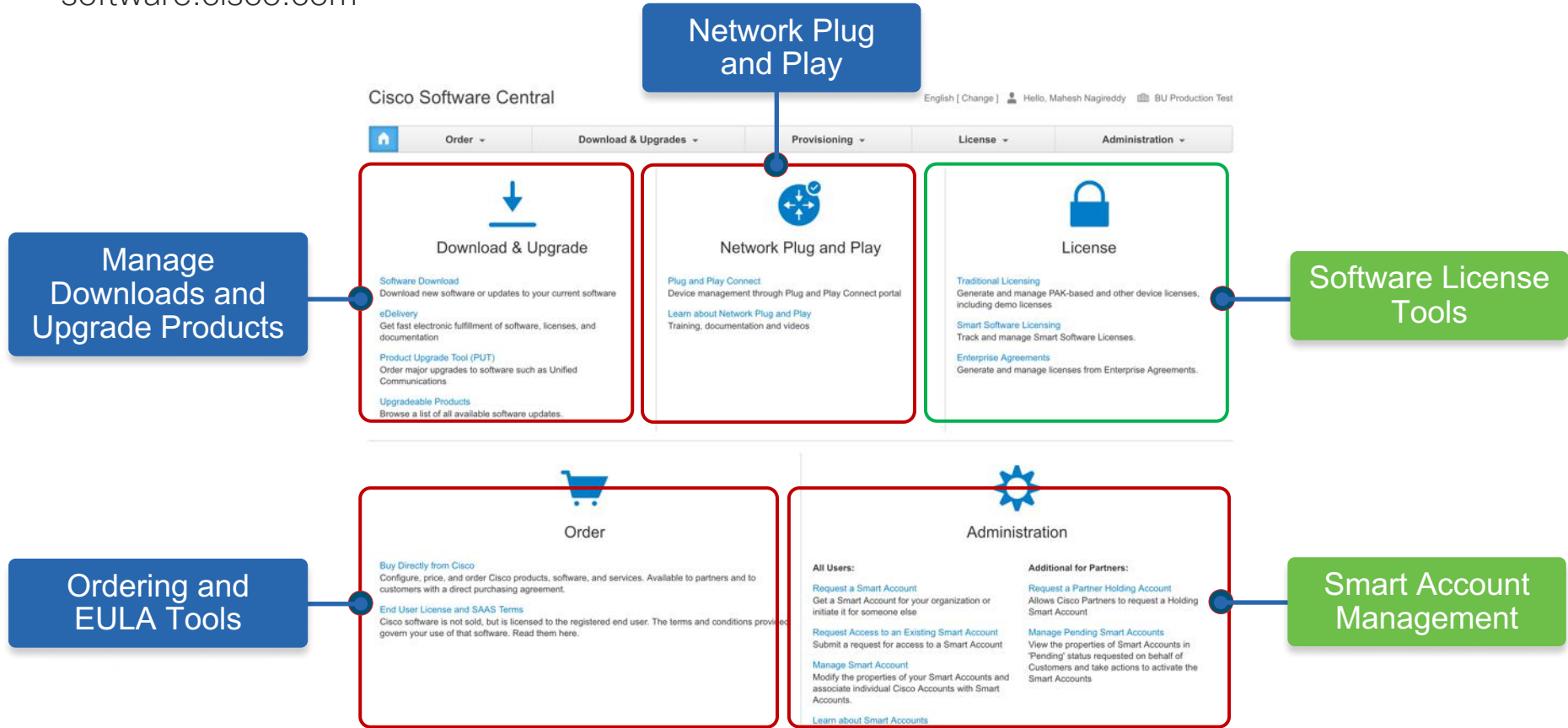
Licenses Available
for Customer Use

software.cisco.com



Cisco Software Central

software.cisco.com



How to request Smart Account

software.cisco.com

Cisco Software Central

English [Change]  Hello, Mahesh Nagireddy  BU Production Test

[Home](#) | **Order** | **Download & Upgrades** | **Provisioning** | **License** | **Administration**

Download & Upgrade

[Software Download](#)
Download new software or updates to your current software

[eDelivery](#)
Get fast electronic fulfillment of software, licenses, and documentation

[Product Upgrade Tool \(PUT\)](#)
Order major upgrades to software such as Unified Communications

[Upgradeable Products](#)
Browse a list of all available software updates.

Network Plug and Play

[Plug and Play Connect](#)
Device management through Plug and Play Connect portal

[Learn about Network Plug and Play](#)
Training, documentation and videos

License

[Traditional Licensing](#)
Generate and manage PAK-based and other device licenses, including demo licenses

[Smart Software Licensing](#)
Track and manage Smart Software Licenses.

[Enterprise Agreements](#)
Generate and manage licenses from Enterprise Agreements.

Order

[Buy Directly from Cisco](#)
Configure, price, and order Cisco products, software, and services. Available to partners and to customers with a direct purchasing agreement.

[End User License and SAAS Terms](#)
Cisco software is not sold, but is licensed to the registered end user. The terms and conditions provided govern your use of that software. Read them here.

Administration

All Users:

- [Request a Smart Account](#)
Get a Smart Account for your organization or initiate it for someone else
- [Request Access to an Existing Smart Account](#)
Submit a request for access to a Smart Account
- [Manage Smart Account](#)
Modify the properties of your Smart Accounts and associate individual Cisco Accounts with Smart Accounts.
- [Learn about Smart Accounts](#)

Additional for Partners:

- [Request a Partner Holding Account](#)
Allows Cisco Partners to request a Holding Smart Account
- [Manage Pending Smart Accounts](#)
View the properties of Smart Accounts in 'Pending' status requested on behalf of Customers and take actions to activate the Smart Accounts

Confirm you have authority to create the account

Cisco Software Central > Request Smart Account

Hello, Timothy Knapp

Smart Account Request

Use this page to request a Smart Account that will be used for managing your company's relationship with Cisco, including initiatives such as Smart Licensing.

Create Account

Would you like to create the Smart Account now?

Yes, I have authority to represent my company and want to create the Smart Account.



A Smart Account helps manage and track Cisco products and services for your organization. By creating this Smart Account, you agree that you are authorized to create accounts and manage product and service entitlements, users and roles on behalf of your organization. **Cisco Partners may not represent a customer.**

No, the person specified below will create the account:

* Email Address:

Message to Creator:

Account Information

The Account Domain Identifier will be used to **uniquely identify the account**. It is based on the email address of the person creating the account by default and must belong to the company that will own this account. [Learn more](#)

* Account Domain

* Account Name

* Account Name:

Cisco Systems, Inc.

Continue

* Account Domain Identifier:

cisco.com [Edit](#)

= mihlubik@cisco.com

Need help with requesting Smart Account?

sa-adoption-support@external.cisco.com

To: sa-adoption-support@external.cisco.com

Subject: Smart Account - Pending

Hi team,

Please, could you help with information, why smart account below is in pending status?

Details:

Cisco.com ID: mihlubik (example, please enter your CCO ID)

End Customer Smart Account: cisco.com (example, please enter the specific Smart Account)



How to structure Smart
Account?

Smart Account Types



Customer Smart Account

- Where licenses are deposited and managed
- Can be managed by customer directly, designated VAR or authorized party through CSSM or LRP



Partner Holding Account

- Partner or reseller store smart enabled products temporarily, before depositing them into an end customer Smart Account.
- **Note:** It is recommended that partners deposit licenses directly into the Customer Smart Account because licenses can only be consumed in the Customer Smart Account

Virtual Accounts

(Organize by business unit, product type, geo, etc.)



Smart Account Roles

Smart and Virtual Account Roles



Smart Account

- Approver
- Administrator
- User



VA 1: Default



2018



2019



2020

Virtual Account

- Administrator
- User



Music



Cars



Sport

Virtual Account

- Administrator
- User

How does Smart Licensing work?



Cisco Smart Licensing is a new way of thinking about licensing at Cisco that is being applied to all products. Smart Licensing is a flexible software model that simplifies activation and management of your Cisco software across the enterprise.

Ownership

Cisco Commerce Workspace (CCW)



I have **purchased 5 Advanced Licenses** for Big University

Big University
Smart Account



I own +5
I am using +1

Usage

Entitlement and Product

I am Device-East5, I belong to Big University and I am using **1 Advanced License**



You are Device-East5, belonging to Big University and the Admissions Department, you are '**In-Compliance**'



How to get licenses to Smart Account

Specify during order

Assign Customer Smart Account

Smart Account Types

End Customer Smart Account ⓘ

End Customer Smart Account Reset

Domain Identifier ▼ internaltestdemoaccount11.cisco.com InternalTestD...

Virtual Account Name

PRG2-LAB

OR

+ Request New Customer Smart Account

Suggested Smart Accounts for End Customer

Account Name	Status
<input type="radio"/> GSSO GES SOUTH TEAM	ACTIVE
<input type="radio"/> INTERNALTESTDEMOACCOUNT3...	ACTIVE
<input type="radio"/> TAC CISCO SYSTEMS, INC.	ACTIVE
<input type="radio"/> INTERNALTESTDEMOACCOUNT1...	ACTIVE
<input type="radio"/> DCLOUD CISCO INTERNAL ACC...	ACTIVE
<input type="radio"/> INTERNALTESTDEMOACCOUNT11...	ACTIVE

Set the Smart Account at Order Level

Assign

Cancel

Smart Software Licensing (CSSM) - Licenses

<input type="checkbox"/>	License	Billing	Purchased	In Use	Balance	Alerts	Actions
<input type="checkbox"/>	Aironet DNA Essentials Term Licenses	Prepaid	2	0	+ 2		Actions ▾
<input type="checkbox"/>	AP Perpetual Networkstack Essentials	Prepaid	2	0	+ 2		Actions ▾
<input type="checkbox"/>	ASAv10 Standard - 1G	Prepaid	2	1	+ 1	⚠ Licenses Expiring	Actions ▾
<input type="checkbox"/>	Cisco AnyConnect Apex License	Prepaid	10	3	+ 7		Actions ▾
<input type="checkbox"/>	Cisco FPR2120 Threat Defense Malware Protection License	Prepaid	3	3	0	⚠ 2 Alerts	Actions ▾
<input type="checkbox"/>	Cisco FPR2120 Threat Defense Threat Protection License	Prepaid	3	3	0	⚠ 2 Alerts	Actions ▾

I own

I am using

Need help with missing licenses?

licensing@cisco.com

To: licensing@cisco.com

Subject: Smart Account – Missing licenses

Hi team,

could you, please, check the following case and let us know what is wrong?

Problem description: xxxxxxxx (please, enter more details briefly)

Cisco.com ID: mihlubik (example, please enter your CCO ID)

End Customer Smart Account: cisco.com (example, please enter the specific Smart Account)

Sales Order #:

SKU, Serial Number:



Single vs. Multiple Smart Accounts?

Large business Smart Account

Multiple Smart Accounts can be set up (**via an exception process**) to satisfy company segmentation requirements but there are some significant restrictions in what visibility and functionality is available to users as a result.



Separate Smart Accounts if:

- **No dedicated individual(s)** as global Smart Account Admin
- **A holding company**
Multiple independent companies



Limitations of separate SAs:

- Licenses **can't be moved across multiple** Smart Accounts
- Reports **can't be generated across multiple** SAs



Cisco recommends your company establish only a single Smart Account unless you have specific requirements which offset the limitations of multiple Smart Accounts

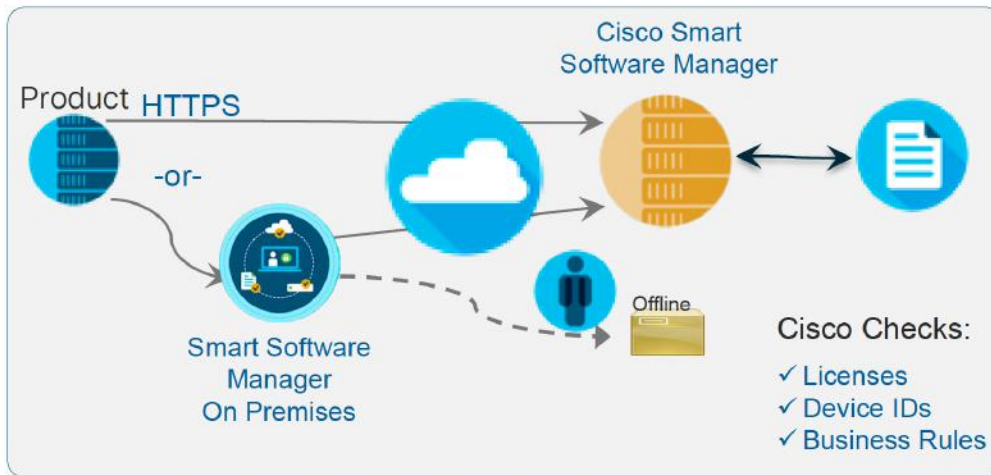
Smart License Enabled Products

Smart License Enabled Products

Information exchanged

- The Cisco Smart License requires the following minimal exchange of information during install/provisioning time.

Information Collected	Required?
Trusted Unique Identifier (SUDI/SUVI/ID)	Yes
Licenses Consumed	Yes
Organization Identifier (Token)	Yes
Hostname	No
IP Address	No
MAC Address	No
Other Smart Call Home Information	No

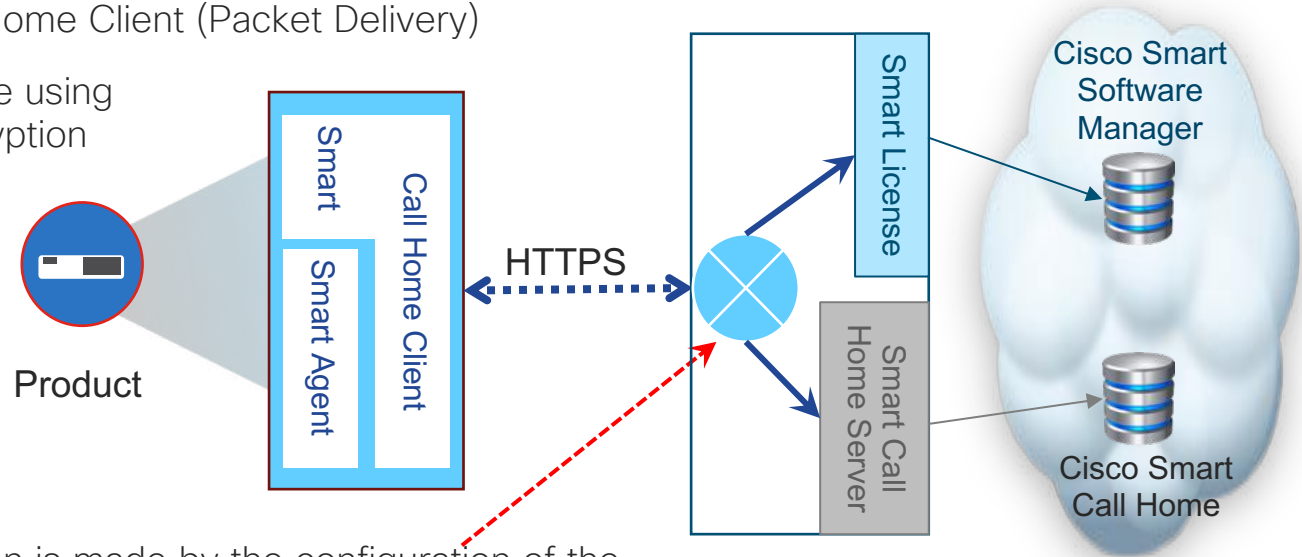


NOTE: hostname is sent by default, to disable sending the hostname, configure "data-privacy" on the device to limit what is shared.

HTTP/S Infrastructure

Smart Call Home – High Level

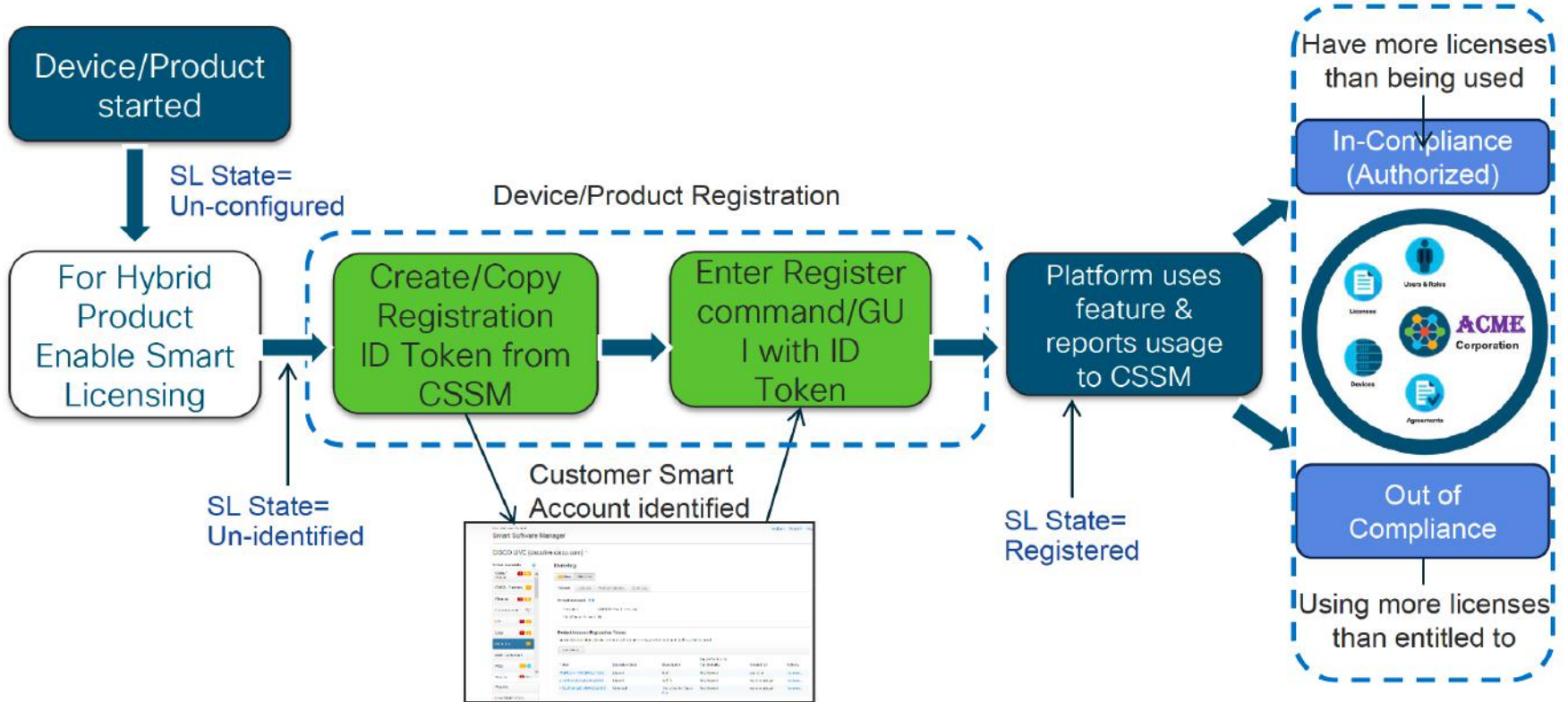
- Smart Call Home (SCH) Server is located in a secure Cisco Data Centre
- Smart License (SL) messages reach SCH Server, they are sent to the Cisco SSM portal
- SL uses only the Call Home Client (Packet Delivery)
- Information is exchange using HTTPS (TLS/SSL encryption of data)



Decision is made by the configuration of the SCH configured “contact”

Smart License Enabled Products

Smart Licensing Workflow



What is Cisco Smart Licensing – ID Tokens

Used to securely Register products to a Smart Account and Virtual Account

ID Tokens are “organizational identifier” used to establish ‘identity’ when registering a Product



An ID Token:

- Can be used once – or reused multiple times
- Can be created and revoked at any time
- Expires after a period of time (default is 30 days; Minimum of 1 day and a maximum of 365 days)

An ID Tokens is NOT:

- Product specific
- Licenses or keys or PAKs
- “one-time use”
- Stored on the Cisco Product
- Needed after the product is registered

Smart License Enabled Products

Smart Licensing Tokens

Cisco Software Central > Smart Software Licensing

InternalTestDemoAccount11.cisco.com

Smart Software Licensing

[Feedback](#) [Support](#) [Help](#)

[Alerts](#) **Inventory** [Convert to Smart Licensing](#) | [Reports](#) | [Preferences](#) | [On-Prem Accounts](#) | [Activity](#)

Virtual Account: **PRG2-LAB** ▾

4 Major | 60 Minor | [Hide Alerts](#)

General

Licenses

Product Instances

Event Log

Virtual Account

Description:

Default Virtual Account: No

Product Instance Registration Tokens

The registration tokens below can be used to register new product instances to this virtual account.

New Token...

Token

Expiration Date

Uses

Export-Controlled

Description

Created By

Actions

Smart License Enabled Products

Paste the “ID Token” created in your Smart Account directly into the CLI

Hybrid Products

```
device> en  
device# config t  
device(config)# license smart enable  
device(config)# end  
device# license smart register idtoken <id token>
```

Smart Only Products

```
device# license smart register idtoken <id token>
```

Understanding RTU to SL Conversion

Smart Licensing on Cat3850/3650

Convert traditional licenses currently in use to Smart Software Licenses

Below are the 3 methods to convert traditional licenses to Smart software licenses

- Convert PAK's to Smart Software Licenses
- Convert traditional term licenses which are currently in use to Smart Software Licenses.
- Device-Led Conversion(DLC)

Device-Led Conversion(DLC) – Cat3650 / 3850

1. Allow smart licensing on device “**device#license smart register idtoken MTBIMGnk ...**”
2. First, device will be **Out of compliance**
3. Adding license to license portal “**device#license smart conversion start**”
4. You will see added license in CSSM, device is still Out of compliance.
5. After cca 3 minutes the license renews. CSSM doesn't have remote access to device. Manual input is needed:

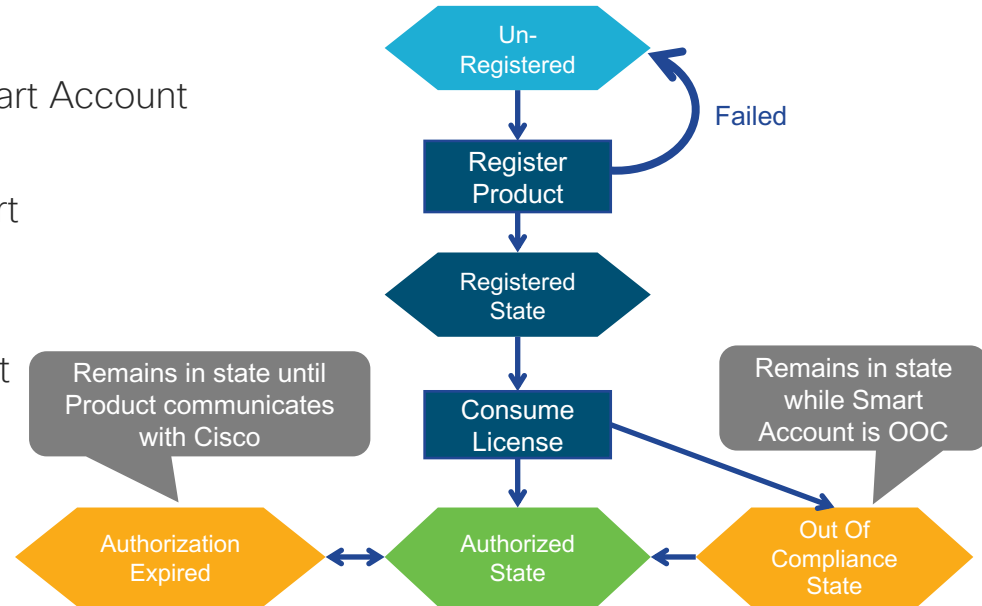
“device#license smart renew auth”

Link: https://www.cisco.com/c/en/us/td/docs/switches/lan/catalyst3650/software/release/16-9/configuration_guide/sys_mgmt/b_169_sys_mgmt_3650_cg/configuring_smart_licensing.html#id_89946

Understanding Product Licensing States

Smart License Product States

- **Registered state**
Product has been associated with a valid Smart Account
- **Authorized state (In Compliance)**
Product is using an entitlement, and the Smart Account does not have a negative balance
- **Out of Compliance state**
Product is using an entitlement, but the Smart Account has a negative balance
- **Authorization expired state**
Product has not communicated with Cisco within a maximum of 90 days

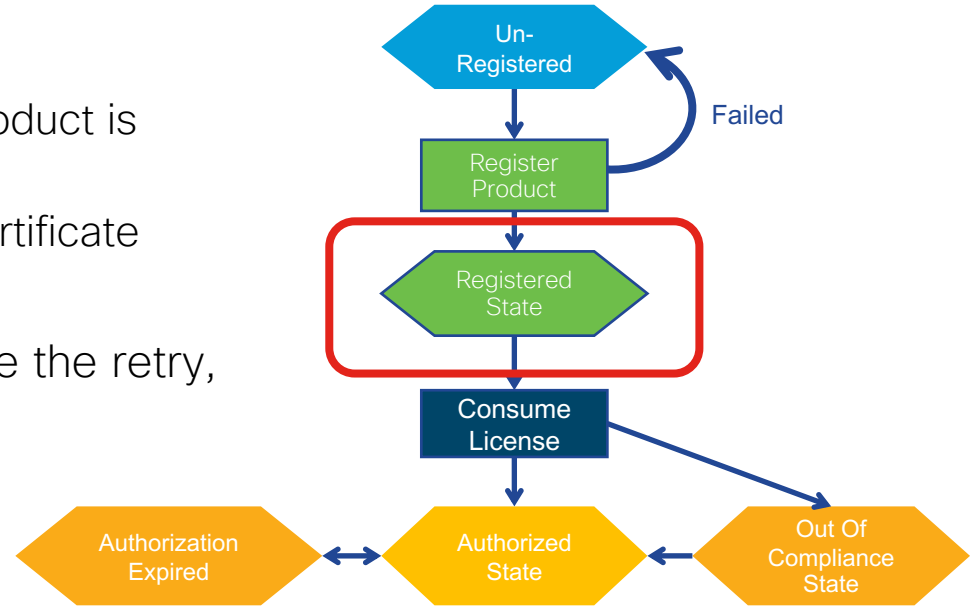


Note: Platforms may differ with timeouts, check with specific platform for details

Smart License Product States

Registered

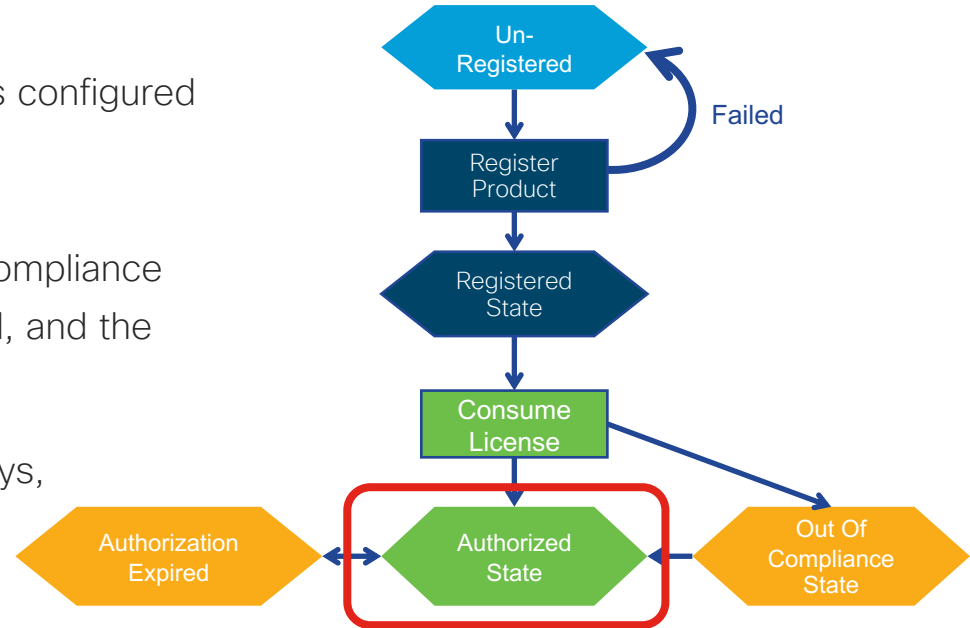
- Initial registration
 1. A Registration Message is sent when Product is registered via CLI with a valid ID Token.
 2. Cisco will reply with a Cryptograph ID certificate that, by default, is valid for one year.
- If there is a failure sending the message the retry, interval will be as follows:
 - Every 15 minutes for 4 hours.
 - Then every hour until successful, or Smart License is disabled via CLI



Smart License Product States

Authorized State

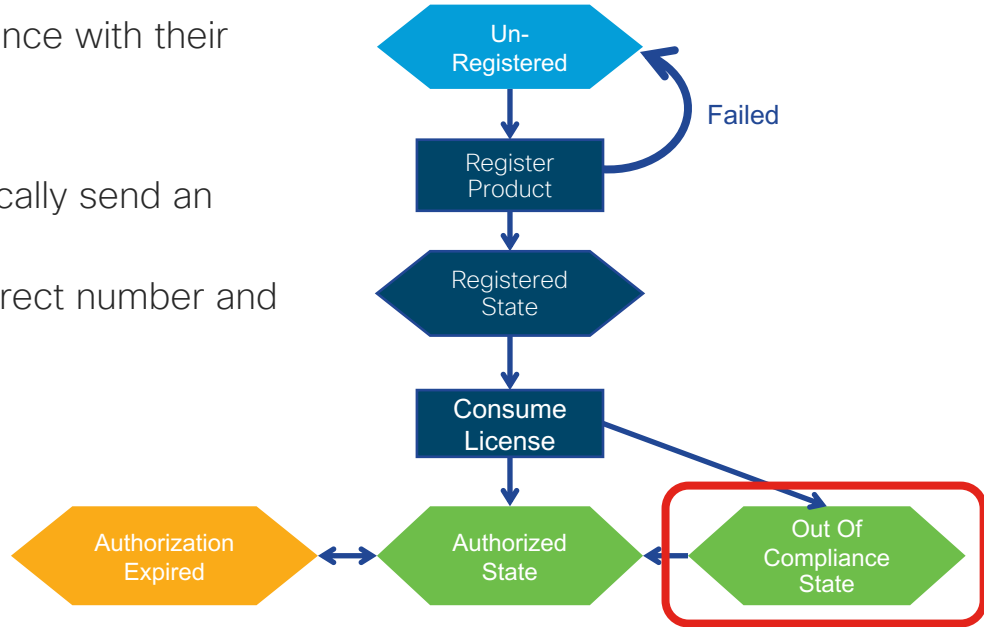
- One a product has been successfully registered, it can be configured to use licenses via CLI
- The Entitlement Message is sent when Product is configured to use licenses via CLI
- The Entitlement Response message will
 - Indicate if the Smart Account is in or out of compliance
 - Provide the length of time the request is valid, and the renewal interval.
- By default the Licenses usage is valid for 90 days, and renewed every 30 days



Smart License Product States

Out of Compliance(OOC) State

- In this state the customer is out of compliance with their contract
- Using too many licenses/entitlements
- When in this state the device will automatically send an authorization renewal request every day
- To enter in to Compliance, deposit the correct number and type of licenses into your Smart Account



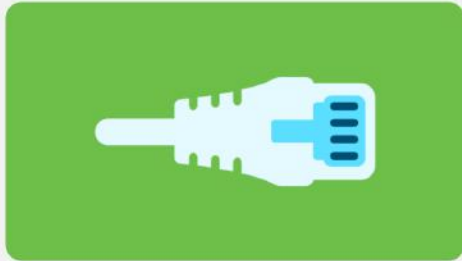
DEMO

Deploying Smart License Enabled Products

3 options

Deployment options for different security profiles

Deployment options for different security profiles



Direct



On-premises

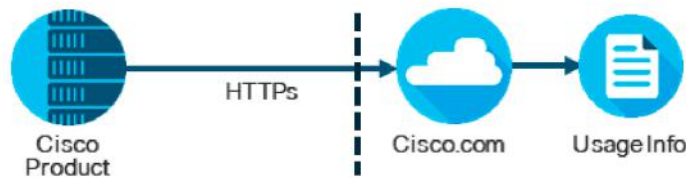


Offline

Deploying Smart License Enabled Products

Access To Cisco

Cisco product sends usage information directly **over the internet or through a HTTP Proxy Server**. No additional components are needed.

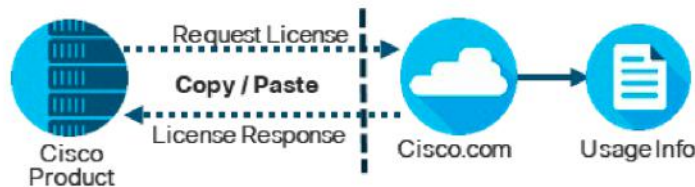


Access Through An On-Premise License Management

Cisco products send usage information to **Smart Software Manager locally installed**. Periodically, exchange information automatically in connected environments or manually in disconnected environments.

No Access - License Reservation

Use copy/paste information between product and Cisco.com to manually check in and out Licenses. Functionally equivalent to current node locking, but with Smart License tracking.



Conclusion

Smart License is here today!

Key decisions you need to make ...

Smart Account

- All Cisco Products are moving to Smart Licensing
- Smart Account is not option
- You will need it to register products?
- Who needs to approve your Smart Account creation?
- Smart Accounts are not Optional!
- Products may have limited functionality until registered!

Get Ready!

Virtual Accounts

- Determine "Span of Control"
- Who will manage the Smart Account?
 - Partner Managed?
 - Central Managed?
 - Distributed Managed?
- Who will manage the Smart License?
 - Who do I get the <id token> from?

Get Set!

Deployment

- Direct/Proxy?
 - Device has Direct Network Access
 - Simplest to Deploy and Use
- SSM On-Prem?
 - Device has Intermediate Network Access
 - One-line change to Product Configuration
- License Reservation?
 - Device has No Network Access

Go!

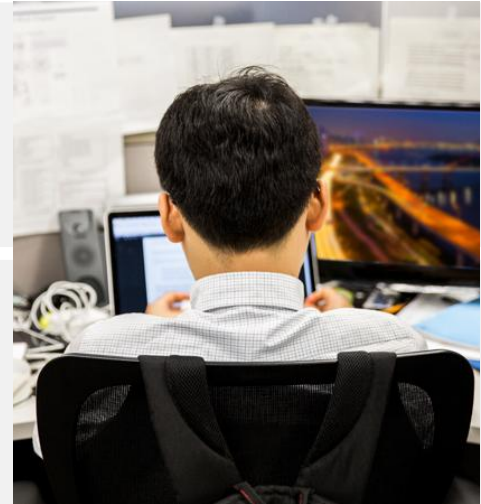
Learn more

Smart License Product Availability

70% of Cisco products are already
Smart License Enabled

See a list of **Smart Enabled Product Families** with Smart/Legacy & Minimum Version

[Here](#)



Resources for Smart Licensing

- Smart Account Home CCO Page: www.cisco.com/go/smartaccounts
- Smart Licensing “Software Manager” CCO Page: www.cisco.com/go/smartsatellite
- Live Training: Register for you or your customer at: <https://communities.cisco.com/docs/DOC-56985>
- YouTube Training Videos: https://www.youtube.com/channel/UCABaWsiDScw_w6kvPcDIjHw
- Training Videos and Demos: <https://community.cisco.com/t5/smart-licensingenterprise/software-on-demand-training-resources-forcustomers/ta-p/3639797>

Getting help:

- For Smart Accounts send email to: sa-adoption-support@external.cisco.com
- For Smart Licensing send email to: licensing@cisco.com
(Include your Cisco.com ID in the email using the format: Cisco.com ID: #####)

Thank You



