



Open Source Used In Webex App Android Android 44.5

Cisco Systems, Inc.

www.cisco.com

Cisco has more than 200 offices worldwide.
Addresses, phone numbers, and fax numbers
are listed on the Cisco website at
www.cisco.com/go/offices.

Text Part Number: 78EE117C99-2037909088

This document contains licenses and notices for open source software used in this product. With respect to the free/open source software listed in this document, if you have any questions or wish to receive a copy of any source code to which you may be entitled under the applicable free/open source license(s) (such as the GNU Lesser/General Public License), please submit this [form](#).

In your requests please include the following reference number 78EE117C99-2037909088

Contents

1.1 json-simple 1.1.1

1.1.1 Available under license

1.2 boost 1.65.1

1.2.1 Available under license

1.3 ldns 1.7.1

1.3.1 Available under license

1.4 websocketpp 0.8.0

1.4.1 Available under license

1.5 minizip 1.01

1.5.1 Available under license

1.6 tidy 5.7.24

1.6.1 Available under license

1.7 jansson 2.10

1.7.1 Available under license

1.8 opus 1.3.1

1.8.1 Available under license

1.9 bouncy-castle 1.65

1.9.1 Available under license

1.10 libilbc 2.0.2

1.10.1 Available under license

1.11 json-cpp 0.7.0

1.11.1 Available under license

1.12 json-c 0.14

1.12.1 Available under license

1.13 libsrtp 2.0.0

1.13.1 Available under license

- 1.14 util-linux 2.31.1**
 - 1.14.1 Available under license
- 1.15 openssl 1.1.1k**
 - 1.15.1 Notifications
 - 1.15.2 Available under license
- 1.16 guava 30.1.1-android**
 - 1.16.1 Available under license
- 1.17 jsoup 1.14.2**
 - 1.17.1 Available under license
- 1.18 libcxx 9.0.9svn**
 - 1.18.1 Available under license
- 1.19 libcxxabi 9.0.9svn**
 - 1.19.1 Available under license
- 1.20 google-play-services 18.0.1**
 - 1.20.1 Available under license
- 1.21 kotlin 1.6.10**
- 1.22 okio 3.0.0**
 - 1.22.1 Available under license
- 1.23 protobuf-java 3.20.1**
 - 1.23.1 Available under license
- 1.24 constraintlayout 2.1.4**
 - 1.24.1 Available under license
- 1.25 safestring 2.0**
 - 1.25.1 Available under license
- 1.26 re2 2022-06-01**
 - 1.26.1 Available under license
- 1.27 appcompat 1.6.0**
 - 1.27.1 Available under license
- 1.28 gson 2.10.1**
 - 1.28.1 Available under license
- 1.29 okhttp 4.11.0**
 - 1.29.1 Available under license
- 1.30 sqlite 3.42.0**
 - 1.30.1 Available under license
- 1.31openh264 3.35.0**
 - 1.31.1 Available under license
- 1.32 firebase-messaging 31.4.0**
 - 1.32.1 Available under license
- 1.33 openssl 1.1.1w**

- 1.33.1 Available under license
- 1.34 crashlytics 31.4.0**
 - 1.34.1 Available under license
- 1.35 sipcc 12.8.0**
 - 1.35.1 Available under license
- 1.36 curl 8.5.0**
 - 1.36.1 Available under license
- 1.37 bcpkix-fips 1.77**
 - 1.37.1 Available under license
- 1.38 libxml2 2.12.5**
 - 1.38.1 Available under license
- 1.39 fmt 10.1.1**
 - 1.39.1 Available under license
- 1.40 nimbus-jose-jwt 9.0**
 - 1.40.1 Available under license
- 1.41 zxing 4.3.0**
 - 1.41.1 Available under license
- 1.42 unbound 1.19.3**
 - 1.42.1 Available under license

1.1 json-simple 1.1.1

1.1.1 Available under license :

Apache License

Version 2.0, January 2004
<http://www.apache.org/licenses/>

TERMS AND CONDITIONS FOR USE, REPRODUCTION, AND DISTRIBUTION

1. Definitions.

"License" shall mean the terms and conditions for use, reproduction, and distribution as defined by Sections 1 through 9 of this document.

"Licensor" shall mean the copyright owner or entity authorized by the copyright owner that is granting the License.

"Legal Entity" shall mean the union of the acting entity and all other entities that control, are controlled by, or are under common control with that entity. For the purposes of this definition, "control" means (i) the power, direct or indirect, to cause the direction or management of such entity, whether by contract or otherwise, or (ii) ownership of fifty percent (50%) or more of the

outstanding shares, or (iii) beneficial ownership of such entity.

"You"
(or "Your") shall mean an individual or Legal Entity
exercising permissions granted by this License.

"Source" form shall mean the preferred form for making modifications,
including but not limited to software source code, documentation
source, and configuration files.

"Object" form shall mean any form resulting from mechanical
transformation or translation of a Source form, including but
not limited to compiled object code, generated documentation,
and conversions to other media types.

"Work" shall mean the work of authorship, whether in Source or
Object form, made available under the License, as indicated by a
copyright notice that is included in or attached to the work
(an example is provided in the Appendix below).

"Derivative Works" shall mean any work, whether in Source or Object
form, that is based on (or derived from) the Work and for which the
editorial revisions, annotations, elaborations,
or other modifications
represent, as a whole, an original work of authorship. For the purposes
of this License, Derivative Works shall not include works that remain
separable from, or merely link (or bind by name) to the interfaces of,
the Work and Derivative Works thereof.

"Contribution" shall mean any work of authorship, including
the original version of the Work and any modifications or additions
to that Work or Derivative Works thereof, that is intentionally
submitted to Licensor for inclusion in the Work by the copyright owner
or by an individual or Legal Entity authorized to submit on behalf of
the copyright owner. For the purposes of this definition, "submitted"
means any form of electronic, verbal, or written communication sent
to the Licensor or its representatives, including but not limited to
communication on electronic mailing lists, source code control systems,
and issue tracking systems
that are managed by, or on behalf of, the
Licensor for the purpose of discussing and improving the Work, but
excluding communication that is conspicuously marked or otherwise
designated in writing by the copyright owner as "Not a Contribution."

"Contributor" shall mean Licensor and any individual or Legal Entity
on behalf of whom a Contribution has been received by Licensor and
subsequently incorporated within the Work.

2. Grant of Copyright License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable copyright license to reproduce, prepare Derivative Works of, publicly display, publicly perform, sublicense, and distribute the Work and such Derivative Works in Source or Object form.

3. Grant of Patent License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable (except as stated in this section) patent license to make, have made, use, offer to sell, sell, import, and otherwise transfer the Work, where such license applies only to those patent claims licensable by such Contributor that are necessarily infringed by their Contribution(s) alone or by combination of their Contribution(s) with the Work to which such Contribution(s) was submitted. If You institute patent litigation against any entity (including a cross-claim or counterclaim in a lawsuit) alleging that the Work or a Contribution incorporated within the Work constitutes direct or contributory patent infringement, then any patent licenses granted to You under this License for that Work shall terminate as of the date such litigation is filed.

4. Redistribution. You may reproduce and distribute copies of the Work or Derivative Works thereof in any medium, with or without modifications, and in Source or Object form, provided that You meet the following conditions:
 - (a) You must give any other recipients of the Work or Derivative Works a copy of this License; and
 - (b) You must cause any modified files to carry prominent notices stating that You changed the files; and
 - (c) You must retain, in the Source form of any Derivative Works that You distribute, all copyright, patent, trademark, and attribution notices from the Source form of the Work, excluding those notices that do not pertain to any part of the Derivative Works; and
 - (d) If the Work includes a "NOTICE" text file as part of its distribution, then any Derivative Works that You distribute must include a readable copy of the attribution notices contained within such NOTICE file, excluding those notices that do not

pertain to any part of the Derivative Works, in at least one of the following places: within a NOTICE text file distributed as part of the Derivative Works; within the Source form or documentation, if provided along with the Derivative Works; or, within a display generated by the Derivative Works, if and wherever such third-party notices normally appear. The contents of the NOTICE file are for informational purposes only and do not modify the License. You may add Your own attribution notices within Derivative Works that You distribute, alongside or as an addendum to the NOTICE text from the Work, provided that such additional attribution notices cannot be construed as modifying the License.

You may add Your own copyright statement to Your modifications and may provide additional or different license terms and conditions for use, reproduction, or distribution of Your modifications, or for any such Derivative Works as a whole, provided Your use, reproduction, and distribution of the Work otherwise complies with the conditions stated in this License.

5. **Submission of Contributions.** Unless You explicitly state otherwise, any Contribution intentionally submitted for inclusion in the Work by You to the Licensor shall be under the terms and conditions of this License, without any additional terms or conditions. Notwithstanding the above, nothing herein shall supersede or modify the terms of any separate license agreement you may have executed with Licensor regarding such Contributions.

6. **Trademarks.** This License does not grant permission to use the trade names, trademarks, service marks, or product names of the Licensor, except as required for reasonable and customary use in describing the origin of the Work and reproducing the content of the NOTICE file.

7. **Disclaimer of Warranty.** Unless required by applicable law or agreed to in writing, Licensor provides the Work (and each Contributor provides its Contributions) on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied, including, without limitation, any warranties or conditions of TITLE, NON-INFRINGEMENT, MERCHANTABILITY, or FITNESS FOR A PARTICULAR PURPOSE. You are solely responsible for determining the appropriateness of using or redistributing the Work and assume any risks associated with Your exercise of permissions under this License.

8. **Limitation of Liability.** In no event and under no legal theory, whether in tort (including negligence), contract, or otherwise, unless required by applicable law (such as deliberate and grossly

negligent acts) or agreed to in writing, shall any Contributor be liable to You for damages, including any direct, indirect, special, incidental, or consequential damages of any character arising as a result of this License or out of the use or inability to use the Work (including but not limited to damages for loss of goodwill, work stoppage, computer failure or malfunction, or any and all other commercial damages or losses), even if such Contributor has been advised of the possibility of such damages.

9. Accepting Warranty or Additional Liability. While redistributing the Work or Derivative Works thereof, You may choose to offer, and charge a fee for, acceptance of support, warranty, indemnity, or other liability obligations and/or rights consistent with this License. However, in accepting such obligations, You may act only on Your own behalf and on Your sole responsibility, not on behalf of any other Contributor, and only if You agree to indemnify, defend, and hold each Contributor harmless for any liability incurred by, or claims asserted against, such Contributor by reason of your accepting any such warranty or additional liability.

END OF TERMS AND CONDITIONS

APPENDIX: How to apply the Apache License to your work.

To apply the Apache License to your work, attach the following boilerplate notice, with the fields enclosed by brackets "[]" replaced with your own identifying information. (Don't include the brackets!) The text should be enclosed in the appropriate comment syntax for the file format. We also recommend that a file or class name and description of purpose be included on the same "printed page" as the copyright notice for easier identification within third-party archives.

Copyright [yyyy] [name of copyright owner]

Licensed under the Apache License, Version 2.0 (the "License");
you may not use this file except in compliance with the License.
You may obtain a copy of the License at

<http://www.apache.org/licenses/LICENSE-2.0>

Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License.

1.2 boost 1.65.1

1.2.1 Available under license :

Boost Software License - Version 1.0 - August 17th, 2003

Permission is hereby granted, free of charge, to any person or organization obtaining a copy of the software and accompanying documentation covered by this license (the "Software") to use, reproduce, display, distribute, execute, and transmit the Software, and to prepare derivative works of the Software, and to permit third-parties to whom the Software is furnished to do so, all subject to the following:

The copyright notices in the Software and this entire statement, including the above license grant, this restriction and the following disclaimer, must be included in all copies of the Software, in whole or in part, and all derivative works of the Software, unless such copies or derivative works are solely in the form of machine-executable object code generated by a source language processor.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS

FOR A PARTICULAR PURPOSE, TITLE AND NON-INFRINGEMENT. IN NO EVENT SHALL THE COPYRIGHT HOLDERS OR ANYONE DISTRIBUTING THE SOFTWARE BE LIABLE FOR ANY DAMAGES OR OTHER LIABILITY, WHETHER IN CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

1.3 Idns 1.7.1

1.3.1 Available under license :

Copyright (C) 2013 by UNINETT Norid AS

This library is free software; you can redistribute it and/or modify it under the same terms as Perl itself, either Perl version 5.8.8 or, at your option, any later version of Perl 5 you may have available.

Copyright (c) 2005,2006, NLnetLabs

All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- * Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
- * Redistributions in binary form must reproduce the above copyright

notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

* Neither the name of NNetLabs nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO

EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

```
#!/bin/sh
```

```
## DO NOT EDIT - This file generated from ./build-aux/ltmain.in
```

```
##      by inline-source v2014-01-03.01
```

```
# libtool (GNU libtool) 2.4.6
```

```
# Provide generalized library-building support services.
```

```
# Written by Gordon Matzigkeit <gord@gnu.ai.mit.edu>, 1996
```

```
# Copyright (C) 1996-2015 Free Software Foundation, Inc.
```

```
# This is free software; see the source for copying conditions.  There is NO
```

```
# warranty; not even for MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.
```

```
# GNU Libtool is free software; you can redistribute it and/or modify
```

```
# it under the terms of the GNU General Public License as published by
```

```
# the Free Software Foundation; either version 2 of the License, or
```

```
# (at your option) any later version.
```

```
#
```

```
# As a special exception to the GNU General Public License,
```

```
# if you distribute this file as part of a program or library that
```

```
# is built using GNU Libtool, you may include this file under the
```

```
# same distribution terms that you use for the rest of that program.
```

```
#
```

```
# GNU
```

```
  Libtool is distributed in the hope that it will be useful, but
```

```
# WITHOUT ANY WARRANTY; without even the implied warranty of
```

```
# MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.  See the GNU
```

```
# General Public License for more details.
```

```
#
```

```
# You should have received a copy of the GNU General Public License
```

```
# along with this program.  If not, see <http://www.gnu.org/licenses/>.
```

This software is copyright (c) 2013 by UNINETT Norid AS. No license is granted to other entities.

All rights reserved.

/* From openssh 4.3p2 filename openbsd-compat/fake-rfc2553.h */

/*

* Copyright (C) 2000-2003 Damien Miller. All rights reserved.

* Copyright (C) 1999 WIDE Project. All rights reserved.

*

* Redistribution and use in source and binary forms, with or without

* modification, are permitted provided that the following conditions

* are met:

* 1. Redistributions of source code must retain the above copyright

* notice, this list of conditions and the following disclaimer.

* 2. Redistributions in binary form must reproduce the above copyright

* notice, this list of conditions and the following disclaimer in the

* documentation and/or other materials provided with the distribution.

* 3. Neither the name of the project nor the names of its contributors

* may be used to endorse or promote products derived from this software

* without specific prior written permission.

*

* THIS SOFTWARE IS PROVIDED BY THE PROJECT AND CONTRIBUTORS ``AS IS" AND

* ANY EXPRESS OR IMPLIED

WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE

* IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE

* ARE DISCLAIMED. IN NO EVENT SHALL THE PROJECT OR CONTRIBUTORS BE LIABLE

* FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL

* DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS

* OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION)

* HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT

* LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY

* OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF

* SUCH DAMAGE.

*/

Copyright (c) 2011, Xelerance

Author: Christopher Olah <chris@xelerance.com>

All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

* Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.

* Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

* Neither the name of Xelerance nor the names of its

contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

/*

* FILE: sha2.c

* AUTHOR: Aaron D. Gifford - <http://www.aarongifford.com/>

*

* Copyright (c) 2000-2001, Aaron D. Gifford

* All rights reserved.

*

* Modified by Jelte Jansen to fit in ldns, and not clash with any

* system-defined SHA code.

* Changes:

* - Renamed (external) functions and constants to fit ldns style

* - Removed _End and _Data functions

* - Added ldns_shaX(data, len, digest) convenience functions

* - Removed prototypes of _Transform functions and made those static

*

* Redistribution and use in source and binary forms, with or without

* modification, are permitted provided that the following conditions

* are met:

* 1. Redistributions of source code must retain the above copyright

* notice, this list of conditions and the following disclaimer.

* 2. Redistributions in binary form must reproduce the above copyright

* notice, this list of conditions and the following disclaimer in the

* documentation and/or other materials provided with the distribution.

* 3. Neither the name of the copyright holder nor the names of contributors

* may be used to endorse or promote products derived from this software

* without specific prior written permission.

*

* THIS SOFTWARE IS PROVIDED BY THE AUTHOR AND CONTRIBUTOR(S) ``AS IS" AND

* ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE

* IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE

* ARE DISCLAIMED. IN NO EVENT SHALL THE AUTHOR OR CONTRIBUTOR(S) BE LIABLE

* FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL

* DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS

* OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION)
* HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT
* LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY
* OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF
* SUCH DAMAGE.

*

* \$Id:

sha2.c,v 1.1 2001/11/08 00:01:51 adg Exp adg \$

*/

Copyright (c) 2005,2006, NLnetLabs

All rights reserved.

Redistribution and use in source and binary forms, with or without
modification, are permitted provided that the following conditions are met:

- * Redistributions of source code must retain the above copyright notice,
this list of conditions and the following disclaimer.
- * Redistributions in binary form must reproduce the above copyright
notice, this list of conditions and the following disclaimer in the
documentation and/or other materials provided with the distribution.
- * Neither the name of NLnetLabs nor the names of its
contributors may be used to endorse or promote products derived from this
software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS"
AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE
IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE
ARE DISCLAIMED. IN NO

EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE
LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR
CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF
SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS
INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN
CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE)
ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE
POSSIBILITY OF SUCH DAMAGE.

/* from openssh 4.3p2 compat/strncpy.c */

/*

* Copyright (c) 1998 Todd C. Miller <Todd.Miller@courtesan.com>

*

* Permission to use, copy, modify, and distribute this software for any
* purpose with or without fee is hereby granted, provided that the above
* copyright notice and this permission notice appear in all copies.

*

* THE SOFTWARE IS PROVIDED "AS IS" AND THE AUTHOR DISCLAIMS ALL WARRANTIES
* WITH REGARD TO THIS SOFTWARE INCLUDING ALL IMPLIED WARRANTIES OF
* MERCHANTABILITY AND FITNESS. IN NO EVENT SHALL THE AUTHOR BE LIABLE FOR
* ANY SPECIAL, DIRECT, INDIRECT, OR CONSEQUENTIAL DAMAGES OR ANY DAMAGES

* WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN
* ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF
* OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE.
*/

Copyright (c) 2011, Xelerance

Author: Christopher Olah <chris@xelerance.com>

All rights reserved.

Redistribution and use in source and binary forms, with or without
modification, are permitted provided that the following conditions are met:

- * Redistributions of source code must retain the above copyright notice,
this list of conditions and the following disclaimer.
- * Redistributions in binary form must reproduce the above copyright
notice, this list of conditions and the following disclaimer in the
documentation and/or other materials provided with the distribution.
- * Neither the name of Xelerance nor the names of its
contributors may be used to endorse or promote products derived from this
software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS"
AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE
IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR
A PARTICULAR PURPOSE
ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE
LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR
CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF
SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS
INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN
CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE)
ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE
POSSIBILITY OF SUCH DAMAGE.

/* From openssl4.3p2 compat/inet_aton.c */

/*

* Copyright (c) 1983, 1990, 1993

* The Regents of the University of California. All rights reserved.

*

* Redistribution and use in source and binary forms, with or without
* modification, are permitted provided that the following conditions
* are met:

- * 1. Redistributions of source code must retain the above copyright
* notice, this list of conditions and the following disclaimer.
- * 2. Redistributions in binary form must reproduce the above copyright
* notice, this list of conditions and the following disclaimer in the
* documentation and/or other materials provided with the distribution.
- * 3. Neither the name of the University nor the names of its contributors
* may be used to endorse or promote products derived from this software

* without specific prior written permission.
*
* THIS SOFTWARE IS PROVIDED BY THE REGENTS AND CONTRIBUTORS ``AS IS" AND
* ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT
* LIMITED TO, THE
* IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE
* ARE DISCLAIMED. IN NO EVENT SHALL THE REGENTS OR CONTRIBUTORS BE LIABLE
* FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL
* DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS
* OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION)
* HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT
* LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY
* OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF
* SUCH DAMAGE.

* -

* Portions Copyright (c) 1993 by Digital Equipment Corporation.

*

* Permission to use, copy, modify, and distribute this software for any
* purpose with or without fee is hereby granted, provided that the above
* copyright notice and this permission notice appear in all copies, and that
* the name of Digital Equipment Corporation not be used in
* advertising or
* publicity pertaining to distribution of the document or software without
* specific, written prior permission.

*

* THE SOFTWARE IS PROVIDED "AS IS" AND DIGITAL EQUIPMENT CORP. DISCLAIMS ALL
* WARRANTIES WITH REGARD TO THIS SOFTWARE, INCLUDING ALL IMPLIED WARRANTIES
* OF MERCHANTABILITY AND FITNESS. IN NO EVENT SHALL DIGITAL EQUIPMENT
* CORPORATION BE LIABLE FOR ANY SPECIAL, DIRECT, INDIRECT, OR CONSEQUENTIAL
* DAMAGES OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR
* PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS
* ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS
* SOFTWARE.

* -

* --Copyright--

*/

Copyright (c) 2009, Zdenek Vasicek (vasicek AT fit.vutbr.cz)

Karel Slany (slany AT fit.vutbr.cz)

All rights reserved.

Redistribution and use in source and binary forms, with or without
modification, are permitted provided that the following conditions are met:

* Redistributions of source code must retain the above copyright notice,
this list of conditions and the following disclaimer.

* Redistributions in binary form must reproduce the above copyright
notice, this list of conditions and the following disclaimer in the
documentation and/or other materials provided with the distribution.

* Neither the name of the organization nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED

WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

1.4 websocketpp 0.8.0

1.4.1 Available under license :

Main Library:

Copyright (c) 2014, Peter Thorson. All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- * Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
- * Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
- * Neither the name of the WebSocket++ Project nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE

DISCLAIMED. IN NO EVENT SHALL PETER THORSON BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

Bundled Libraries:

***** Base 64 Library (base64/base64.hpp) *****

base64.hpp is a repackaging of the base64.cpp and base64.h files into a single header suitable for use as a header only library. This conversion was done by Peter Thorson (webmaster@zaphoyd.com) in 2012. All modifications to the code are redistributed under the same license as the original, which is listed below.

base64.cpp and base64.h

Copyright (C) 2004-2008 Ren Nyffenegger

This source code is provided 'as-is',
without any express or implied
warranty. In no event will the author be held liable for any damages
arising from the use of this software.

Permission is granted to anyone to use this software for any purpose,
including commercial applications, and to alter it and redistribute it
freely, subject to the following restrictions:

1. The origin of this source code must not be misrepresented; you must not claim that you wrote the original source code. If you use this source code in a product, an acknowledgment in the product documentation would be appreciated but is not required.
2. Altered source versions must be plainly marked as such, and must not be misrepresented as being the original source code.
3. This notice may not be removed or altered from any source distribution.

Ren Nyffenegger rene.nyffenegger@adp-gmbh.ch

***** SHA1 Library (sha1/sha1.hpp) *****

sha1.hpp is a repackaging of the sha1.cpp and sha1.h files from the shallsha1 library (<http://code.google.com/p/smallsha1/>) into a single header suitable for use as a header only library. This conversion was done by Peter Thorson (webmaster@zaphoyd.com) in 2013. All modifications to the code are redistributed under the same license as the original, which is listed below.

Copyright (c) 2011, Micael Hildenborg
All rights reserved.

Redistribution and use in source and binary forms, with or without
modification, are permitted provided that the following conditions are met:

- * Redistributions of source code must retain the above copyright

notice, this list of conditions and the following disclaimer.

- * Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
- * Neither the name of Micael Hildenborg nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY Micael Hildenborg "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL Micael Hildenborg BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

***** MD5 Library (common/md5.hpp) *****

md5.hpp is a reformulation of the md5.h and md5.c code from <http://www.opensource.apple.com/source/cups/cups-59/cups/md5.c> to allow it to function as a component of a header only library. This conversion was done by Peter Thorson (webmaster@zaphoyd.com) in 2012 for the WebSocket++ project. The changes are released under the same license as the original (listed below)

Copyright (C) 1999, 2002 Aladdin Enterprises. All rights reserved.

This software is provided 'as-is', without any express or implied warranty. In no event will the authors be held liable for any damages arising from the use of this software.

Permission is granted to anyone to use this software for any purpose, including commercial applications, and to alter it and redistribute it freely, subject to the following restrictions:

1. The origin of this software must not be misrepresented; you must not claim that you wrote the original software. If you use this software in a product, an acknowledgment in the product documentation would be appreciated but is not required.
2. Altered source versions must be plainly marked as such, and must not be misrepresented as being the original software.
3. This notice may not be removed or altered from any source distribution.

L. Peter Deutsch

ghost@aladdin.com

***** UTF8 Validation logic (utf8_validation.hpp) *****

utf8_validation.hpp is adapted from code originally written by Bjoern Hoehrmann <bjoern@hoehrmann.de>. See <http://bjoern.hoehrmann.de/utf-8/decoder/dfa/> for details.

The original license:

Copyright (c) 2008-2009 Bjoern Hoehrmann <bjoern@hoehrmann.de>

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS",
WITHOUT WARRANTY OF ANY KIND, EXPRESS OR
IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY,
FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE
AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER
LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM,
OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE
SOFTWARE.

1.5 minizip 1.01

1.5.1 Available under license :

Boost Software License - Version 1.0 - August 17th, 2003

Permission is hereby granted, free of charge, to any person or organization obtaining a copy of the software and accompanying documentation covered by this license (the "Software") to use, reproduce, display, distribute, execute, and transmit the Software, and to prepare derivative works of the Software, and to permit third-parties to whom the Software is furnished to do so, all subject to the following:

The copyright notices in the Software and this entire statement, including the above license grant, this restriction and the following disclaimer, must be included in all copies of the Software, in whole or in part, and all derivative works of the Software, unless such copies or derivative works are solely in the form of machine-executable object code generated by

a source language processor.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, TITLE AND NON-INFRINGEMENT. IN NO EVENT SHALL THE COPYRIGHT HOLDERS OR ANYONE DISTRIBUTING THE SOFTWARE BE LIABLE FOR ANY DAMAGES OR OTHER LIABILITY, WHETHER IN CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

1.6 tidy 5.7.24

1.6.1 Available under license :

HTML Tidy

HTML parser and pretty printer

Copyright (c) 1998-2016 World Wide Web Consortium
(Massachusetts Institute of Technology, European Research
Consortium for Informatics and Mathematics, Keio University).
All Rights Reserved.

Additional contributions (c) 2001-2016 University of Toronto, Terry Teague,
@geoffmcl, HTACG, and others.

Contributing Author(s):

Dave Raggett <dsr@w3.org>

The contributing author(s) would like to thank all those who helped with testing, bug fixes and suggestions for improvements. This wouldn't have been possible without your help.

COPYRIGHT NOTICE:

This software and documentation is provided "as is," and the copyright holders and contributing author(s) make no representations or warranties, express or implied, including but not limited to, warranties of merchantability or fitness for any particular purpose or that the use of the software or documentation will not infringe any third party patents, copyrights, trademarks or other rights.

The copyright holders and contributing author(s) will not be held liable for any direct, indirect, special or consequential damages

arising out of any use of the software or documentation, even if advised of the possibility of such damage.

Permission is hereby granted to use, copy, modify, and distribute this source code, or portions hereof, documentation and executables, for any purpose, without fee, subject to the following restrictions:

1. The origin of this source code must not be misrepresented.
2. Altered versions must be plainly marked as such and must not be misrepresented as being the original source.
3. This Copyright notice may not be removed or altered from any source or altered source distribution.

The copyright holders and contributing author(s) specifically permit, without fee, and encourage the use of this source code as a component for supporting the Hypertext Markup Language in commercial products. If you use this source code in a product, acknowledgement is not required but would be appreciated.

1.7 jansson 2.10

1.7.1 Available under license :

Copyright (c) 2009-2018 Petri Lehtinen <petri@digip.org>

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

1.8 opus 1.3.1

1.8.1 Available under license :

Copyright 2001-2011 Xiph.Org, Skype Limited, Octasic,
Jean-Marc Valin, Timothy B. Terriberry,
CSIRO, Gregory Maxwell, Mark Borgerding,
Erik de Castro Lopo

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
- Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
- Neither the name of Internet Society, IETF or IETF Trust, nor the names of specific contributors, may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS
"AS IS" AND ANY EXPRESS
OR IMPLIED WARRANTIES, INCLUDING, BUT NOT
LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR
A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER
OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL,
EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO,
PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR
PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF
LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING
NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS
SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

Opus is subject to the royalty-free patent licenses which are specified at:

Xiph.Org Foundation:
<https://datatracker.ietf.org/ipr/1524/>

Microsoft Corporation:
<https://datatracker.ietf.org/ipr/1914/>

Broadcom Corporation:

1.9 bouncy-castle 1.65

1.9.1 Available under license :

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

1.10 libilbc 2.0.2

1.10.1 Available under license :

Copyright (c) 2011, The WebRTC project authors. All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- * Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
- * Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
- * Neither the name of Google nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO

EVENT SHALL THE COPYRIGHT HOLDER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

1.11 json-cpp 0.7.0

1.11.1 Available under license :

The JsonCpp library's source code, including accompanying documentation, tests and demonstration applications, are licensed under the following conditions...

The author (Baptiste Lepilleur) explicitly disclaims copyright in all jurisdictions which recognize such a disclaimer. In such jurisdictions, this software is released into the Public Domain.

In jurisdictions which do not recognize Public Domain property (e.g. Germany as of 2010), this software is Copyright (c) 2007-2010 by Baptiste Lepilleur, and is released under the terms of the MIT License (see below).

In jurisdictions which recognize Public Domain property, the user of this software may choose to accept it either as 1) Public Domain, 2) under the conditions of the MIT License (see below), or 3) under the terms of dual Public Domain/MIT License conditions described here, as they choose.

The MIT License is about as close to Public Domain as a license can get, and is described in clear, concise terms at:

http://en.wikipedia.org/wiki/MIT_License

The full text of the MIT License follows:

=====
Copyright (c) 2007-2010 Baptiste Lepilleur

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

=====

(END LICENSE TEXT)

The MIT license is compatible with both the GPL and commercial software, affording one all of the rights of Public Domain with the minor nuisance of being required to keep the above copyright notice and license text in the source code. Note also that by accepting the Public Domain "license" you can re-license your copy using whatever license you like.

1.12 json-c 0.14

1.12.1 Available under license :

Copyright (c) 2009-2012 Eric Haszlkiewicz

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

Copyright (c) 2004, 2005 Metaparadigm Pte Ltd

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

1.13 libsrtp 2.0.0

1.13.1 Available under license :

```
/*
 *
 * Copyright (c) 2001-2006 Cisco Systems, Inc.
 * All rights reserved.
 *
 * Redistribution and use in source and binary forms, with or without
 * modification, are permitted provided that the following conditions
 * are met:
 *
 * Redistributions of source code must retain the above copyright
 * notice, this list of conditions and the following disclaimer.
 *
 * Redistributions in binary form must reproduce the above
 * copyright notice, this list of conditions and the following
 * disclaimer in the documentation and/or other materials provided
 * with the distribution.
 *
 * Neither the name of the Cisco Systems, Inc. nor the names of its
 * contributors may be used to endorse or promote products derived
 * from this software without specific prior written permission.
 *
```

* THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS
* "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT
* LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY
AND FITNESS
* FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE
* COPYRIGHT HOLDERS OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT,
* INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES
* (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR
* SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION)
* HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT,
* STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE)
* ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED
* OF THE POSSIBILITY OF SUCH DAMAGE.
*
*/

1.14 util-linux 2.31.1

1.14.1 Available under license :

GNU GENERAL PUBLIC LICENSE

Version 2, June 1991

Copyright (C) 1989, 1991 Free Software Foundation, Inc.,
51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA
Everyone is permitted to copy and distribute verbatim copies
of this license document, but changing it is not allowed.

Preamble

The licenses for most software are designed to take away your freedom to share and change it. By contrast, the GNU General Public License is intended to guarantee your freedom to share and change free software--to make sure the software is free for all its users. This General Public License applies to most of the Free Software Foundation's software and to any other program whose authors commit to using it. (Some other Free Software Foundation software is covered by the GNU Lesser General Public License instead.) You can apply it to your programs, too.

When we speak of free software, we are referring to freedom, not price.

Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish), that you receive source code or can get it if you want it, that you can change the software or use pieces of it in new free programs; and that you know you can do these things.

To protect your rights, we need to make restrictions that forbid anyone to deny you these rights or to ask you to surrender the rights. These restrictions translate to certain responsibilities for you if you distribute copies of the software, or if you modify it.

For example, if you distribute copies of such a program, whether gratis or for a fee, you must give the recipients all the rights that you have. You must make sure that they, too, receive or can get the source code. And you must show them these terms so they know their rights.

We protect your rights with two steps: (1) copyright the software, and (2) offer you this license which gives you legal permission to copy, distribute and/or modify the software.

Also, for each author's protection and ours, we want to make certain that everyone understands that there is no warranty for this free software. If the software is modified by someone else and passed on, we want its recipients to know that what they have is not the original, so that any problems introduced by others will not reflect on the original authors' reputations.

Finally, any free program is threatened constantly by software patents. We wish to avoid the danger that redistributors of a free program will individually obtain patent licenses, in effect making the program proprietary. To prevent this, we have made it clear that any patent must be licensed for everyone's free use or not licensed at all.

The precise terms and conditions for copying, distribution and modification follow.

GNU GENERAL PUBLIC LICENSE TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

0. This License applies to any program or other work which contains a notice placed by the copyright holder saying it may be distributed under the terms of this General Public License. The "Program", below, refers to any such program or work, and a "work based on the Program" means either the Program or any derivative work under copyright law: that is to say, a work containing the Program or a portion of it, either verbatim or with modifications and/or translated into another language. (Hereinafter, translation is included without limitation in the term "modification".) Each licensee is addressed as "you".

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running the Program is not restricted, and the output from the Program

is covered only if its contents constitute a work based on the Program (independent of having been made by running the Program). Whether that is true depends on what the Program does.

1. You may copy and distribute verbatim copies of the Program's source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty; and give any other recipients of the Program a copy of this License along with the Program.

You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.

2. You may modify your copy or copies of the Program or any portion of it, thus forming a work based on the Program, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:

a) You must cause the modified files to carry prominent notices stating that you changed the files and the date of any change.

b) You must cause any work that you distribute or publish, that in whole or in part contains or is derived from the Program or any part thereof, to be licensed as a whole at no charge to all third parties under the terms of this License.

c) If the modified program normally reads commands interactively when run, you must cause it, when started running for such interactive use in the most ordinary way, to print or display an announcement including an appropriate copyright notice and a notice that there is no warranty (or else, saying that you provide a warranty) and that users may redistribute the program under these conditions, and telling the user how to view a copy of this License. (Exception: if the Program itself is interactive but does not normally print such an announcement, your work based on the Program is not required to print an announcement.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Program, 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 Program, 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.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Program.

In addition, mere aggregation of another work not based on the Program with the Program (or with a work based on the Program) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

3. You may copy and distribute the Program (or a work based on it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you also do one of the following:

a) Accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,

b) 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,

c) Accompany it with the information you received as to the offer to distribute corresponding source code. (This alternative is allowed only for noncommercial distribution and only if you received the program in object code or executable form with such an offer, in accord with Subsection b above.)

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.

If distribution of executable or object code is made by offering

access to copy from a designated place, then offering equivalent access to copy the source code from the same place counts as distribution of the source code, even though third parties are not compelled to copy the source along with the object code.

4. You may not copy, modify, sublicense, or distribute the Program except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense or distribute the Program is void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.

5. You are not required to accept this License, since you have not signed it. However, nothing else grants you permission to modify or distribute the Program or its derivative works. These actions are prohibited by law if you do not accept this License. Therefore, by modifying or distributing the Program (or any work based on the Program), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Program or works based on it.

6. Each time you redistribute the Program (or any work based on the Program), the recipient automatically receives a license from the original licensor to copy, distribute or modify the Program subject to these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties to this License.

7. If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot distribute so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not distribute the Program at all. For example, if a patent license would not permit royalty-free redistribution of the Program by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Program.

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to

apply and the section as a whole is intended to apply in other circumstances.

It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system, which is implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system in reliance on consistent application of that system; it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot impose that choice.

This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this License.

8. If the distribution and/or use of the Program is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Program under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.

9. The Free Software Foundation may publish revised and/or new versions of the General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Program specifies a version number of this License which applies to it and "any later version", you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation. If the Program does not specify a version number of this License, you may choose any version ever published by the Free Software Foundation.

10. If you wish to incorporate parts of the Program into other free programs whose distribution conditions are different, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.

NO WARRANTY

11. BECAUSE THE PROGRAM IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE PROGRAM, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE PROGRAM "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE PROGRAM IS WITH YOU. SHOULD THE PROGRAM PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

12. IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE PROGRAM AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE PROGRAM (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE PROGRAM TO OPERATE WITH ANY OTHER PROGRAMS), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

END OF TERMS AND CONDITIONS

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.

<one line to give the program's name and a brief idea of what it does.>

Copyright (C) <year> <name of author>

This program is free software; you can redistribute it and/or modify it under the terms of the GNU

General Public License as published by

the Free Software Foundation; either version 2 of the License, or

(at your option) any later version.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of

MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with this program; if not, write to the Free Software 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) year 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 is a sample; alter the names:

```
Yoyodyne, Inc., hereby disclaims all copyright interest in the program
`Gnomovision' (which makes passes at compilers) written by James Hacker.
```

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

This General Public License does not permit incorporating your program into proprietary programs. If your program is a subroutine library, you may consider it more useful to permit linking proprietary applications with the library. If this

is what you want to do, use the GNU Lesser General Public License instead of this License.

This library is free software; you can redistribute it and/or modify it under the terms of the GNU Lesser General Public License as published by the Free Software Foundation; either version 2.1 of the License, or (at your option) any later version.

The complete text of the license is available in the `../Documentation/licenses/COPYING.LGPLv2.1` file.

WEV @@ WEV[B "1

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, and the entire permission notice in its entirety, including the disclaimer of warranties.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. The name of the author may not be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED ``AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ALL OF WHICH ARE HEREBY DISCLAIMED. IN NO EVENT SHALL THE AUTHOR BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL

DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF NOT ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

x ?"U@,5 @mISmIN<GimCN7g1uE
43mI,5WEV @@ WEV @mImImIAmImImI0mImImI*mImI
A0mImImI...
lost+found...

;9GimCN7g

!"#\$%&'()*+,-
./0123456789:;<=>?@ABCDEFGHIJKLMNOPQRSTUVWXYZ[\]^_`abcdefghijklmnopqrstuvwxyz{|}~

!"#\$%&'()*+,-
./0123456789:;<=>?@ABCDEFGHIJKLMNOPQRSTUVWXYZ[\]^_`abcdefghijklmnopqrstuvwxyz{|}~

!"#\$%&'()*+,-
./0123456789:;<=>?@ABCDEFGHIJKLMNOPQRSTUVWXYZ[\]^_`abcdefghijklmnopqrstuvwxyz{|}~

!"#\$%&'()*+,-
./0123456789:;<=>?@ABCDEFGHIJKLMNOPQRSTUVWXYZ[\]^_`abcdefghijklmnopqrstuvwxyz{|}~WEV @@
WEV[B "1

/*

* Copyright (c) 1989 The Regents of the University of California.

* All rights reserved.

*

* Redistribution and use in source and binary forms, with or without
 * modification, are permitted provided that the following conditions
 * are met:

* 1. Redistributions of source code must retain the above copyright
 * notice, this list of conditions and the following disclaimer.

* 2. Redistributions in binary form must reproduce the above copyright
 * notice, this list of conditions and the following disclaimer in the
 * documentation and/or other materials provided with the distribution.

* 3. All advertising materials mentioning features or use of this software
 * must display the following acknowledgement:

* This product includes software developed by the University of
 * California, Berkeley and its contributors.

* 4. Neither the name of the University nor the names of its contributors
 * may be used to endorse or promote products derived from this software
 *

without specific prior written permission.

*

* THIS SOFTWARE IS PROVIDED BY THE REGENTS AND CONTRIBUTORS ``AS IS" AND
 * ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE
 * IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE
 * ARE DISCLAIMED. IN NO EVENT SHALL THE REGENTS OR CONTRIBUTORS BE LIABLE
 * FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL
 * DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS
 * OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION)
 * HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT
 * LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY
 * OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF
 * SUCH DAMAGE.

*/

This library is free software; you can redistribute it and/or
 modify it under the terms of the Modified BSD License.

The complete text of the license is available in the
 ../Documentation/licenses/COPYING.BSD-3 file.

1.15 openssl 1.1.1k

1.15.1 Notifications :

This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit
 (<http://www.openssl.org/>)

This product includes cryptographic software written by Eric Young (eay@cryptsoft.com).

This product includes software written by Tim Hudson (tjh@cryptsoft.com).

1.15.2 Available under license :

LICENSE ISSUES

=====

The OpenSSL toolkit stays under a double license, i.e. both the conditions of the OpenSSL License and the original SSLeay license apply to the toolkit.

See below for the actual license texts.

OpenSSL License

/* =====

* Copyright (c) 1998-2019 The OpenSSL Project. All rights reserved.

*

* Redistribution and use in source and binary forms, with or without
* modification, are permitted provided that the following conditions
* are met:

*

* 1. Redistributions of source code must retain the above copyright
* notice, this list of conditions and the following disclaimer.

*

* 2. Redistributions in binary form must reproduce the above copyright
* notice, this list of conditions and the following disclaimer in
* the documentation and/or other materials provided with the
* distribution.

*

* 3. All advertising materials mentioning features or use
of this

* software must display the following acknowledgment:

* "This product includes software developed by the OpenSSL Project
* for use in the OpenSSL Toolkit. (<http://www.openssl.org/>)"

*

* 4. The names "OpenSSL Toolkit" and "OpenSSL Project" must not be used to
* endorse or promote products derived from this software without
* prior written permission. For written permission, please contact
* openssl-core@openssl.org.

*

* 5. Products derived from this software may not be called "OpenSSL"
* nor may "OpenSSL" appear in their names without prior written
* permission of the OpenSSL Project.

*

* 6. Redistributions of any form whatsoever must retain the following
* acknowledgment:

* "This product includes software developed by the OpenSSL Project
* for use in the OpenSSL Toolkit (<http://www.openssl.org/>)"

*

* THIS SOFTWARE IS PROVIDED BY THE OpenSSL PROJECT ``AS IS'' AND ANY
* EXPRESSED OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED

TO, THE

* IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR
* PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE OpenSSL PROJECT OR
* ITS CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL,
* SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT
* NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES;
* LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION)
* HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT,
* STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE)
* ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED
* OF THE POSSIBILITY OF SUCH DAMAGE.

* =====

*

* This product includes cryptographic software written by Eric Young
* (eay@cryptsoft.com). This product includes software written by Tim
* Hudson (tjh@cryptsoft.com).

*

*/

Original SSLeay License

/* Copyright (C) 1995-1998 Eric Young (eay@cryptsoft.com)

* All rights reserved.

*

* This package is an SSL implementation written

* by Eric Young (eay@cryptsoft.com).

* The implementation was written so as to conform with Netscapes SSL.

*

* This library is free for commercial and non-commercial use as long as

* the following conditions are aheared to. The following conditions

* apply to all code found in this distribution, be it the RC4, RSA,

* lhash, DES, etc., code; not just the SSL code. The SSL documentation

* included with this distribution is covered by the same copyright terms

* except that the holder is Tim Hudson (tjh@cryptsoft.com).

*

* Copyright remains Eric Young's, and as such any Copyright notices in

* the code are not to be removed.

* If this package is used in a product, Eric Young should be given attribution

* as the author of the parts of the library used.

* This can be in the form of a textual message at program startup or

* in documentation (online or textual) provided with the package.

*

* Redistribution and use in source and binary forms, with or without

* modification, are permitted provided that the following conditions

* are met:

* 1. Redistributions of source code must retain the copyright

* notice, this list of conditions and the following disclaimer.

- * 2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
- * 3. All advertising materials mentioning features or use of this software must display the following acknowledgement:
 - * "This product includes cryptographic software written by Eric Young (eay@cryptsoft.com)"
 - * The word 'cryptographic' can be left out if the routines from the library being used are not cryptographic related :-).
- * 4. If you include any Windows specific code (or a derivative thereof) from the apps directory (application code) you must include an acknowledgement:
 - * "This product includes software written by Tim Hudson (tjh@cryptsoft.com)"
 - *
 - * THIS SOFTWARE IS PROVIDED BY ERIC YOUNG ``AS IS'' AND
 - * ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE AUTHOR OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.
 - *
 - * The licence and distribution terms for any publically available version or derivative of this code cannot be changed. i.e. this code cannot simply be copied and put under another distribution licence [including the GNU Public Licence.]
 - * /

1.16 guava 30.1.1-android

1.16.1 Available under license :

No license file was found, but licenses were detected in source scan.

- /*
- * Copyright (C) 2015 The Guava Authors
- *
- * Licensed under the Apache License, Version 2.0 (the "License");
- * you may not use this file except in compliance with the License.
- * You may obtain a copy of the License at
- *
- * <http://www.apache.org/licenses/LICENSE-2.0>

*
* Unless required by applicable law or agreed to in writing, software
* distributed under the License is distributed on an "AS IS" BASIS,
* WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
* See the License for the specific language governing permissions and
* limitations under the License.
*/

Found in path(s):

* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/graph/package-info.java

No license file was found, but licenses were detected in source scan.

/*

* Copyright (C) 2007 The Guava Authors

*

* Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except
* in compliance with the License. You may obtain a copy of the License at

*

* <http://www.apache.org/licenses/LICENSE-2.0>

*

* Unless required by applicable law or agreed to in writing, software distributed under the License
* is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either
express

* or implied. See the License for the specific language governing permissions and limitations under
* the License.

*/

/*

* This following method is a modified version of one found in

* <http://gee.cs.oswego.edu/cgi-bin/viewcvs.cgi/jsr166/src/test/tck/AbstractExecutorServiceTest.java?revision=1.30>

* which contained the following notice:

*

* Written by Doug Lea with assistance from members of JCP JSR-166 Expert Group and released to

*

the public domain, as explained at <http://creativecommons.org/publicdomain/zero/1.0/>

*

* Other contributors include Andrew Wright, Jeffrey Hayes, Pat Fisher, Mike Judd.

*/

Found in path(s):

* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/util/concurrent/MoreExecutors.java

No license file was found, but licenses were detected in source scan.

/*

* Copyright (C) 2010 The Guava Authors

*

* Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except

* in compliance with the License. You may obtain a copy of the License at
*
* <http://www.apache.org/licenses/LICENSE-2.0>
*
* Unless required by applicable law or agreed to in writing, software distributed under the License
* is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either
express
* or implied. See the License for the specific language governing permissions and limitations under
* the License.
*/

Found in path(s):

* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/net/package-info.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/util/concurrent/Atomics.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/base/Strings.java
*
/opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/util/concurrent/ThreadFactoryBuilder.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/base/Ascii.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/collect/ContiguousSet.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/util/concurrent/Monitor.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/util/concurrent/ForwardingBlockingQueue.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/base/Equivalence.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/collect/SortedLists.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/util/concurrent/UncaughtExceptionHandler.java
*
/opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/primitives/package-info.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/annotations/Beta.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/util/concurrent/ListeningExecutorService.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/annotations/package-info.java

No license file was found, but licenses were detected in source scan.

/*

* Copyright (C) 2014 The Guava Authors

*
* Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except
* in compliance with the License. You may obtain a copy of the License at
*
* <http://www.apache.org/licenses/LICENSE-2.0>
*
* Unless required by applicable law or agreed to in writing, software distributed under the License
* is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either
express
* or implied. See the License for the specific language governing permissions and limitations under
* the License.
*/

Found in path(s):

* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/eventbus/SubscriberRegistry.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/base/MoreObjects.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/math/Quantiles.java
*

/opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/eventbus/Subscriber.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/eventbus/Dispatcher.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/util/concurrent/TrustedListenableFutureTask.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/util/concurrent/ListenerCallQueue.java

No license file was found, but licenses were detected in source scan.

/*

* Copyright (C) 2008 The Guava Authors

*

* Licensed under the Apache License, Version 2.0 (the "License");

* you may not use this file except in compliance with the License.

* You may obtain a copy of the License at

*

* <http://www.apache.org/licenses/LICENSE-2.0>

*

* Unless required by applicable law or agreed to in writing, software

* distributed under the License is distributed on an "AS IS" BASIS,

* WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.

* See the License for the specific language governing permissions and

* limitations under the License.

*/

/*

* This method was rewritten in Java from an intermediate step of the Murmur hash function in

```
* http://code.google.com/p/smhasher/source/browse/trunk/MurmurHash3.cpp, which contained the
* following header:
*
* MurmurHash3 was written by Austin Appleby, and is placed in the public domain. The author
* hereby
disclaims copyright to this source code.
*/
```

Found in path(s):

```
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/Hashing.java
```

No license file was found, but licenses were detected in source scan.

```
/*
```

```
* Copyright (C) 2009 The Guava Authors
```

```
/*
```

```
* Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except
* in compliance with the License. You may obtain a copy of the License at
```

```
/*
```

```
* http://www.apache.org/licenses/LICENSE-2.0
```

```
/*
```

```
* Unless required by applicable law or agreed to in writing, software distributed under the License
* is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either
express
```

```
* or implied. See the License for the specific language governing permissions and limitations under
* the License.
```

```
*/
```

Found in path(s):

```
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/util/concurrent/AbstractExecutionThreadService.java
```

```
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/util/concurrent/ForwardingFuture.java
```

```
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/base/Splitter.java
```

```
/*
```

```
 /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/io/ByteArrayDataInput.java
```

```
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/annotations/GwtIncompatible.java
```

```
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/util/concurrent/ForwardingListenableFuture.java
```

```
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/MapMakerInternalMap.java
```

```
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/util/concurrent/Service.java
```

```
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/annotations/GwtCompatible.java
```

* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/escape/ArrayBasedUnicodeEscaper.java

*

/opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/collect/Cut.java

* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/escape/Escapers.java

* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/net/HostSpecifier.java

* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/cache/LocalCache.java

* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/io/LineProcessor.java

* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/util/concurrent/JdkFutureAdapters.java

* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/util/concurrent/AbstractIdleService.java

* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/io/ByteArrayDataOutput.java

*

/opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/cache/CacheBuilder.java

* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/util/concurrent/AbstractService.java

* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/collect/SparseImmutableTable.java

* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/collect/RegularImmutableTable.java

* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/reflect/TypeResolver.java

* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/collect/MapMaker.java

* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/cache/ReferenceEntry.java

* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/net/InternetDomainName.java

*

/opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/html/HtmlEscapers.java

* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/collect/DenseImmutableTable.java

* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/net/UrlEscapers.java

* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/util/concurrent/Callables.java

* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/escape/ArrayBasedEscaperMap.java

* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-

```
jar/com/google/common/util/concurrent/SettableFuture.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/primitives/SignedBytes.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/util/concurrent/ForwardingFluentFuture.java
*
/opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/escape/ArrayBasedCharEscaper.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/io/ByteProcessor.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/xml/XmlEscapers.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/primitives/UnsignedBytes.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/escape/Platform.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/base/Platform.java
No license file was found, but licenses were detected in source scan.
```

```
/*
* Copyright (C) 2020 The Guava Authors
*
* Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except
* in compliance with the License. You may obtain a copy of the License at
*
* http://www.apache.org/licenses/LICENSE-2.0
*
* Unless required by applicable law or agreed to in writing, software distributed under the License
* is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either
express
* or implied. See the License for the specific language governing permissions and limitations under
* the License.
*/
/**
* Holder for web specializations of methods of { @code Floats }. Intended to be empty for regular
* version.
*/
```

```
Found in path(s):
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/primitives/FloatsMethodsForWeb.java
No license file was found, but licenses were detected in source scan.
```

```
/*
* Copyright (C) 2011 The Guava Authors
*
* Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except
```

```

* in compliance with the License. You may obtain a copy of the License at
*
* http://www.apache.org/licenses/LICENSE-2.0
*
* Unless required by applicable law or agreed to in writing, software distributed under the License
* is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either
express
* or implied. See the License for the specific language governing permissions and limitations under
* the License.
*/
/*
* This method was written by Doug Lea with assistance from members of JCP JSR-166 Expert Group
* and released to the public domain, as explained at
* http://creativecommons.org/licenses/publicdomain
*
* As of 2010/06/11, this method is identical to the (package private) hash method in OpenJDK 7's
* java.util.HashMap
class.
*/

```

Found in path(s):

```

* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/util/concurrent/Striped.java

```

No license file was found, but licenses were detected in source scan.

```

/*
* Copyright (C) 2011 The Guava Authors.
*
* Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except
* in compliance with the License. You may obtain a copy of the License at
*
* http://www.apache.org/licenses/LICENSE-2.0
*
* Unless required by applicable law or agreed to in writing, software distributed under the License
* is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either
express
* or implied. See the License for the specific language governing permissions and limitations under
* the License.
*/

```

Found in path(s):

```

* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/hash/package-info.java

```

No license file was found, but licenses were detected in source scan.

```

/*
* Copyright (C) 2016 The Guava Authors
*

```

```
* Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except
* in compliance with the License. You may obtain a copy of the License at
*
* http://www.apache.org/licenses/LICENSE-2.0
*
* Unless required by applicable law or agreed to in writing, software distributed under the License
* is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either
express
* or implied. See the License for the specific language governing permissions and limitations under
* the License.
*/
/**
* Holder for extra methods of { @code Objects } only in web. Intended to be empty for regular
* version.
*/
```

Found in path(s):

```
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/base/ExtraObjectsMethodsForWeb.java
```

No license file was found, but licenses were detected in source scan.

```
/*
* Copyright (C) 2020 The Guava Authors
*
* Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except
* in compliance with the License. You may obtain a copy of the License at
*
* http://www.apache.org/licenses/LICENSE-2.0
*
* Unless required by applicable law or agreed to in writing, software distributed under the License
* is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either
express
* or implied. See the License for the specific language governing permissions and limitations under
* the License.
*/
/**
* Holder for web specializations of methods of { @code Doubles }. Intended to be empty for regular
* version.
*/
```

Found in path(s):

```
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/primitives/DoublesMethodsForWeb.java
```

No license file was found, but licenses were detected in source scan.

```
/*
* Copyright (C) 2007 The Guava Authors
*
```

* Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except
* in compliance with the License. You may obtain a copy of the License at
*
* <http://www.apache.org/licenses/LICENSE-2.0>
*
* Unless required by applicable law or agreed to in writing, software distributed under the License
* is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either
express
* or implied. See the License for the specific language governing permissions and limitations under
* the License.
*/

Found in path(s):

* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/base/Preconditions.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/io/Resources.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/io/package-info.java
*
/opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/base/FinalizablePhantomReference.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/base/Suppliers.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/base/Charsets.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/io/LineReader.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/base/FinalizableSoftReference.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/io/CharStreams.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/base/Predicate.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/io/ByteStreams.java
*
/opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/primitives/Primitives.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/io/LineBuffer.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/base/FinalizableWeakReference.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/base/Predicates.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/base/Functions.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-


```

jar/com/google/common/base/AbstractIterator.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/base/package-info.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/HashBiMap.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/eventbus/DeadEvent.java
*
/opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/base/FinalizableReference.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/eventbus/Subscribe.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/base/Objects.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/base/Supplier.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/io/MultiInputStream.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/Interners.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/EnumMultiset.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/util/concurrent/ExecutionList.java
*
/opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/util/concurrent/package-info.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/base/Defaults.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/base/Function.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/base/FinalizableReferenceQueue.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/util/concurrent/AbstractFuture.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/io/Closeables.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/eventbus/AllowConcurrentEvents.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/io/Files.java
*
/opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/eventbus/AsyncEventBus.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/io/LittleEndianDataOutputStream.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/eventbus/EventBus.java

```

* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/io/CountingOutputStream.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/base/Throwables.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/util/concurrent/ListenableFuture.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/util/concurrent/DirectExecutor.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/io/CountingInputStream.java
*

/opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/io/LittleEndianDataInputStream.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/io/Flushables.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/eventbus/package-info.java

No license file was found, but licenses were detected in source scan.

/*

* Copyright (C) 2013 The Guava Authors

*

* Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except
* in compliance with the License. You may obtain a copy of the License at

*

* <http://www.apache.org/licenses/LICENSE-2.0>

*

* Unless required by applicable law or agreed to in writing, software distributed under the License
* is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either
* express

* or implied. See the License for the specific language governing permissions and limitations under
* the License.

*/

Found in path(s):

* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/collect/AbstractTable.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/reflect/TypeVisitor.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/base/VerifyException.java
*

/opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/util/concurrent/Runnables.java

* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/base/Verify.java

* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/hash/HashingInputStream.java

```
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/util/concurrent/WrappingScheduledExecutorService.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/eventbus/SubscriberExceptionContext.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/thirdparty/publicsuffix/PublicSuffixType.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/base/Utf8.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/FilteredMultimapValues.java
*
```

```
/opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/io/CharSequenceReader.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/eventbus/SubscriberExceptionHandler.java
```

No license file was found, but licenses were detected in source scan.

```
/*
```

```
* Copyright (C) 2008 The Guava Authors
```

```
*
```

```
* Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except
* in compliance with the License. You may obtain a copy of the License at
```

```
*
```

```
* http://www.apache.org/licenses/LICENSE-2.0
```

```
*
```

```
* Unless required by applicable law or agreed to in writing, software distributed under the License
* is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either
express
```

```
* or implied. See the License for the specific language governing permissions and limitations under
* the License.
```

```
*/
```

Found in path(s):

```
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/base/Converter.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/net/PercentEscaper.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/thirdparty/publicsuffix/TrieParser.java
*
```

```
/opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/primitives/Booleans.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/base/internal/Finalizer.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/primitives/Doubles.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/base/CharMatcher.java
```

* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/primitives/Floats.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/util/concurrent/SequentialExecutor.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/primitives/Bytes.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/util/concurrent/ListenableFutureTask.java
*
/opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/collect/FluentIterable.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/base/Stopwatch.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/io/FileBackedOutputStream.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/primitives/Shorts.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/primitives/Ints.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/primitives/Chars.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/io/MultiReader.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/base/Joiner.java
*
/opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/escape/UnicodeEscaper.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/primitives/Longs.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/net/InetAddresses.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/escape/Escaper.java
No license file was found, but licenses were detected in source scan.

/*

* Written by Doug Lea with assistance from members of JCP JSR-166
* Expert Group and released to the public domain, as explained at
* <http://creativecommons.org/publicdomain/zero/1.0/>
*/

Found in path(s):

* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/hash/LongAdder.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/cache/Striped64.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-

jar/com/google/common/cache/LongAdder.java

* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-

jar/com/google/common/hash/Striped64.java

* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-

jar/com/google/common/util/concurrent/AtomicDoubleArray.java

No license file was found, but licenses were detected in source scan.

/*

* Copyright (C) 2013 The Guava Authors

*

* Licensed under the Apache License, Version 2.0 (the "License");

* you may not use this file except in compliance with the License.

* You may obtain a copy of the License at

*

* <http://www.apache.org/licenses/LICENSE-2.0>

*

* Unless required by applicable law or agreed to in writing, software

* distributed under the License is distributed on an "AS IS" BASIS,

* WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.

* See the License for the specific language governing permissions and

* limitations under the License.

*/

Found in path(s):

* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-

jar/com/google/common/collect/MultimapBuilder.java

No license file was found, but licenses were detected in source scan.

/*

* Copyright (C) 2011 The Guava Authors

*

* Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except

* in compliance with the License. You may obtain a copy of the License at

*

* <http://www.apache.org/licenses/LICENSE-2.0>

*

* Unless required by applicable law or agreed to in writing, software distributed under the

* License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND,
either

* express or implied. See the License for the specific language governing permissions and

* limitations under the License.

*/

Found in path(s):

* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-

jar/com/google/common/collect/ImmutableSortedMultisetFauxverideShim.java

* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-

jar/com/google/common/collect/RangeSet.java

```

* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/SortedIterable.java
*
/opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/SortedIterables.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/AbstractRangeSet.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/ImmutableSortedMultiset.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/GeneralRange.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/RegularImmutableSortedMultiset.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/ForwardingSortedMultiset.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/Count.java

```

No license file was found, but licenses were detected in source scan.

```

/*

```

```

* Copyright (C) 2007 The Guava Authors

```

```

*

```

```

* Licensed under the Apache License, Version 2.0 (the "License");

```

```

* you may not use this file except in compliance with the License.

```

```

* You may obtain a copy of the License at

```

```

*

```

```

* http://www.apache.org/licenses/LICENSE-2.0

```

```

*

```

```

* Unless required by applicable law or agreed to in writing, software

```

```

* distributed under the License is distributed on an "AS IS" BASIS,

```

```

* WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.

```

```

* See the License for the specific language governing permissions and

```

```

* limitations under the License.

```

```

*/

```

```

/**

```

```

* Returns an array containing all of the elements in the specified collection. This method

```

```

* returns the elements in the order they are returned by the collection's iterator. The returned

```

```

* array is "safe" in that no references to it are maintained by the collection. The caller is

```

```

* thus free to modify the returned

```

```

array.

```

```

*

```

```

* <p>This method assumes that the collection size doesn't change while the method is running.

```

```

*

```

```

* <p>TODO(kevinb): support concurrently modified collections?

```

```

*

```

```

* @param c the collection for which to return an array of elements

```

```

*/

```

Found in path(s):

* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/collect/ObjectArrays.java

No license file was found, but licenses were detected in source scan.

/*

* Copyright (C) 2009 The Guava Authors

*

* Licensed under the Apache License, Version 2.0 (the "License");

* you may not use this file except in compliance with the License.

* You may obtain a copy of the License at

*

* <http://www.apache.org/licenses/LICENSE-2.0>

*

* Unless required by applicable law or agreed to in writing, software

* distributed under the License is distributed on an "AS IS" BASIS,

* WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.

* See the License for the specific language governing permissions and

* limitations under the License.

*/

/**

* Not supported. You are attempting to create a map that may contain a non-{@code Comparable}

* key. Proper calls will resolve to the version in {@code ImmutableSortedMap}, not this dummy

* version.

*

* @throws UnsupportedOperationException always

* @deprecated Pass a key of type {@code Comparable}

to use {@link

* `ImmutableSortedMap#of(Comparable, Object)}`.

*/

Found in path(s):

* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/collect/ImmutableSortedMapFauxverideShim.java

No license file was found, but licenses were detected in source scan.

/*

* Copyright (C) 2011 The Guava Authors

*

* Licensed under the Apache License, Version 2.0 (the "License");

* you may not use this file except in compliance with the License.

* You may obtain a copy of the License at

*

* <http://www.apache.org/licenses/LICENSE-2.0>

*

* Unless required by applicable law or agreed to in writing, software

* distributed under the License is distributed on an "AS IS" BASIS,

* WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.

* See the License for the specific language governing permissions and
* limitations under the License.
*/

Found in path(s):

* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/GwtTransient.java

No license file was found, but licenses were detected in source scan.

/*

* Copyright 2019 The Guava Authors

*

* Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except
* in compliance with the License. You may obtain a copy of the License at

*

* <http://www.apache.org/licenses/LICENSE-2.0>

*

* Unless required by applicable law or agreed to in writing, software distributed under the License
* is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either
express

* or implied. See the License for the specific language governing permissions and limitations under
* the License.

*/

Found in path(s):

* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/util/concurrent/IgnoreJRERRequirement.java

No license file was found, but licenses were detected in source scan.

/*

* Copyright (C) 2005 The Guava Authors

*

* Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except
* in compliance with the License. You may obtain a copy of the License at

*

* <http://www.apache.org/licenses/LICENSE-2.0>

*

* Unless required by applicable law or agreed to in writing, software distributed under the License
* is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either
express

* or implied. See the License for the specific language governing permissions and limitations under
* the License.

*/

Found in path(s):

* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/reflect/Reflection.java

No license file was found, but licenses were detected in source scan.

/*

* Copyright (C) 2016 The Guava Authors

*

* Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except

* in compliance with the License. You may obtain a copy of the License at

*

* <http://www.apache.org/licenses/LICENSE-2.0>

*

* Unless required by applicable law or agreed to in writing, software distributed under the License

* is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either
express

* or implied. See the License for the specific language governing permissions and limitations under

* the License.

*/

Found in path(s):

* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/base/JdkPattern.java

* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/base/PatternCompiler.java

* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/base/CommonPattern.java

*

/opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/base/CommonMatcher.java

No license file was found, but licenses were detected in source scan.

/*

* Copyright (C) 2012 The Guava Authors

*

* Licensed under the Apache License, Version 2.0 (the "License");

* you may not use this file except in compliance with the License.

* You may obtain a copy of the License at

*

* <http://www.apache.org/licenses/LICENSE-2.0>

*

* Unless required by applicable law or agreed to in writing, software

* distributed under the License is distributed on an "AS IS" BASIS,

* WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.

* See the License for the specific language governing permissions and

* limitations under the License.

*/

Found in path(s):

* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/FilteredEntrySetMultimap.java

* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
 jar/com/google/common/collect/ForwardingImmutableSet.java
 * /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
 jar/com/google/common/collect/SortedMultisetBridge.java
 *
 /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
 jar/com/google/common/collect/DescendingImmutableSortedSet.java
 * /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
 jar/com/google/common/collect/FilteredKeySetMultimap.java
 * /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
 jar/com/google/common/collect/ImmutableEnumMap.java
 * /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
 jar/com/google/common/collect/FilteredEntryMultimap.java
 * /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
 jar/com/google/common/collect/DescendingMultiset.java
 * /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
 jar/com/google/common/collect/TreeRangeMap.java
 * /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
 jar/com/google/common/collect/ForwardingNavigableSet.java
 *
 /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
 jar/com/google/common/collect/AllEqualOrdering.java
 * /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
 jar/com/google/common/collect/TreeTraverser.java
 * /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
 jar/com/google/common/collect/RegularImmutableAsList.java
 * /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
 jar/com/google/common/collect/CompactHashMap.java
 * /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
 jar/com/google/common/collect/TransformedIterator.java
 * /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
 jar/com/google/common/util/concurrent/ForwardingBlockingDeque.java
 * /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
 jar/com/google/common/collect/ForwardingDeque.java
 * /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
 jar/com/google/common/collect/AbstractSortedKeySortedSetMultimap.java
 *
 /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
 jar/com/google/common/collect/ForwardingNavigableMap.java
 * /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
 jar/com/google/common/collect/TransformedListIterator.java
 * /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
 jar/com/google/common/collect/ForwardingBlockingDeque.java
 * /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
 jar/com/google/common/collect/ForwardingImmutableList.java
 * /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
 jar/com/google/common/collect/AbstractMultimap.java
 * /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-

```
jar/com/google/common/collect/CompactHashSet.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/EvictingQueue.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/FilteredSetMultimap.java
*
/opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/CompactLinkedHashMap.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/CompactLinkedHashSet.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/AbstractNavigableMap.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/ForwardingImmutableMap.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/FilteredKeyListMultimap.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/UnmodifiableSortedMultiset.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/RangeMap.java
*
/opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/FilteredMultimap.java
No license file was found, but licenses were detected in source scan.
```

```
/*
* Copyright (C) 2008 The Guava Authors
*
* Licensed under the Apache License, Version 2.0 (the "License");
* you may not use this file except in compliance with the License.
* You may obtain a copy of the License at
*
* http://www.apache.org/licenses/LICENSE-2.0
*
* Unless required by applicable law or agreed to in writing, software
* distributed under the License is distributed on an "AS IS" BASIS,
* WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
* See the License for the specific language governing permissions and
* limitations under the License.
*/
```

Found in path(s):

```
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/ImmutableEntry.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/thirdparty/publicsuffix/PublicSuffixPatterns.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/CollectPreconditions.java
```

*
/opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/ImmutableMapEntrySet.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/ImmutableMapKeySet.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/ImmutableCollection.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/Table.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/ImmutableSortedSet.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/UnmodifiableIterator.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/ImmutableMap.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/ImmutableBiMap.java
*
/opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/TreeBasedTable.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/RegularImmutableBiMap.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/Platform.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/ImmutableListMultimap.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/Tables.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/Range.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/HashBasedTable.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/ImmutableMultimap.java
*
/opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/RegularImmutableMap.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/Collections2.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/ImmutableMultiset.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/StandardTable.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/Serialization.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/StandardRowSortedTable.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-

jar/com/google/common/collect/PeekingIterator.java

*

/opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/collect/EmptyImmutableListMultimap.java

* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/collect/ImmutableMapValues.java

No license file was found, but licenses were detected in source scan.

/*

* Copyright (C) 2018 The Guava Authors

*

* Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except
* in compliance with the License. You may obtain a copy of the License at

*

* <http://www.apache.org/licenses/LICENSE-2.0>

*

* Unless required by applicable law or agreed to in writing, software distributed under the License
* is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either
express
* or implied. See the License for the specific language governing permissions and limitations under
* the License.

*/

Found in path(s):

* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/hash/ImmutableSupplier.java

* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/util/concurrent/ExecutionSequencer.java

No license file was found, but licenses were detected in source scan.

/*

* Copyright (C) 2015 The Guava Authors

*

* Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except
* in compliance with the License. You may obtain a copy of the License at

*

* <http://www.apache.org/licenses/LICENSE-2.0>

*

* Unless required by applicable law or agreed to in writing, software distributed under the License
* is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either
express
* or implied. See the License for the specific language governing permissions and limitations under
* the License.

*/

Found in path(s):

* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/hash/LittleEndianByteArray.java

```
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/util/concurrent/InterruptibleTask.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/hash/MacHashFunction.java
```

```
*
/opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/io/ReaderInputStream.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/util/concurrent/AggregateFutureState.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/util/concurrent/Platform.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/ConsumingQueueIterator.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/util/concurrent/AsyncCallable.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/hash/FarmHashFingerprint64.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/util/concurrent/CombinedFuture.java
```

No license file was found, but licenses were detected in source scan.

```
/*
```

```
* Copyright (C) 2009 The Guava Authors
```

```
*
```

```
* Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except
* in compliance with the License. You may obtain a copy of the License at
```

```
*
```

```
* http://www.apache.org/licenses/LICENSE-2.0
```

```
*
```

```
* Unless required by applicable law or agreed to in writing, software distributed under the License
* is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either
express
```

```
* or implied. See the License for the specific language governing permissions and limitations under
* the License.
```

```
*/
```

```
/**
```

```
* Outer class that exists solely to let us write {@code Partially.GwtIncompatible} instead of plain
* {@code GwtIncompatible}. This is more accurate for {@link Futures#catching}, which is available
* under GWT but with a slightly different signature.
```

```
*
```

```
* <p>We can't use {@code PartiallyGwtIncompatible} because then the GWT compiler
wouldn't recognize
```

```
* it as a {@code GwtIncompatible} annotation. And for {@code Futures.catching}, we need the GWT
* compiler to autostrip the normal server method in order to expose the special, inherited GWT
* version.
```

```
*/
```

Found in path(s):

* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/util/concurrent/Partially.java

No license file was found, but licenses were detected in source scan.

/*

* Copyright (C) 2012 The Guava Authors

*

* Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except

* in compliance with the License. You may obtain a copy of the License at

*

* <http://www.apache.org/licenses/LICENSE-2.0>

*

* Unless required by applicable law or agreed to in writing, software distributed under the License

* is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express

* or implied. See the License for the specific language governing permissions and limitations under

* the License.

*/

Found in path(s):

* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/reflect/ImmutableTypeToInstanceMap.java

* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/reflect/MutableTypeToInstanceMap.java

* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/io/CharSource.java

*

/opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/collect/CartesianList.java

* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/collect/ImmutableRangeMap.java

* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/escape/package-info.java

* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/hash/LongAddable.java

* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/io/BaseEncoding.java

* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/io/ByteSource.java

* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/math/PairedStatsAccumulator.java

* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/reflect/AbstractInvocationHandler.java

*

/opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/reflect/ClassPath.java

* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/math/StatsAccumulator.java

* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/io/Closer.java

* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/xml/package-info.java

* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/util/concurrent/SmoothRateLimiter.java

* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/util/concurrent/ListenableScheduledFuture.java

* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/math/PairedStats.java

* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/reflect/Invokable.java

*

/opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/reflect/TypeCapture.java

* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/math/Stats.java

* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/util/concurrent/RateLimiter.java

* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/reflect/Parameter.java

* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/reflect/TypeToInstanceMap.java

* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/reflect/Element.java

* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/cache/LongAddables.java

* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/io/FileWriteMode.java

*

/opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/hash/LongAddables.java

* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/io/ByteSink.java

* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/util/concurrent/ServiceManager.java

* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/base/StandardSystemProperty.java

* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/io/CharSink.java

* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/hash/AbstractByteHasher.java

* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/math/LinearTransformation.java

* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/html/package-info.java

*

/opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/hash/SipHashFunction.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/reflect/package-info.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/hash/ChecksumHashFunction.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/collect/ImmutableRangeSet.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/collect/FilteredKeyMultimap.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/cache/LongAddable.java

No license file was found, but licenses were detected in source scan.

/*

* Copyright (C) 2020 The Guava Authors

*

* Licensed under the Apache License, Version 2.0 (the "License");

* you may not use this file except in compliance with the License.

* You may obtain a copy of the License at

*

* <http://www.apache.org/licenses/LICENSE-2.0>

*

* Unless required by applicable law or agreed to in writing, software

* distributed under the License is distributed on an "AS IS" BASIS,

* WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.

* See the License for the specific language governing permissions and

* limitations under the License.

*/

Found in path(s):

* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/util/concurrent/ServiceManagerBridge.java

* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/base/Java8Usage.java

No license file was found, but licenses were detected in source scan.

/*

* Copyright (C) 2020 The Guava Authors

*

* Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except

* in compliance with the License. You may obtain a copy of the License at

*

* <http://www.apache.org/licenses/LICENSE-2.0>

*

* Unless required by applicable law or agreed to in writing, software distributed under the License

* is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express

* or implied. See the License for the specific language governing permissions and limitations under
* the License.
*/

Found in path(s):

* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/math/BigDecimalMath.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/io/Java8Compatibility.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/util/concurrent/OverflowAvoidingLockSupport.java
*

/opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/hash/Java8Compatibility.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/math/ToDoubleRounder.java

No license file was found, but licenses were detected in source scan.

/*

* Copyright (C) 2017 The Guava Authors

*

* Licensed under the Apache License, Version 2.0 (the "License");

* you may not use this file except in compliance with the License.

* You may obtain a copy of the License at

*

* <http://www.apache.org/licenses/LICENSE-2.0>

*

* Unless required by applicable law or agreed to in writing, software

* distributed under the License is distributed on an "AS IS" BASIS,

* WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.

* See the License for the specific language governing permissions and

* limitations under the License.

*/

Found in path(s):

* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/ObjectCountLinkedHashMap.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/graph/Traverser.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/graph/AbstractBaseGraph.java
*

/opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/graph/BaseGraph.java

* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/ObjectCountHashMap.java

* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/util/concurrent/ClosingFuture.java

No license file was found, but licenses were detected in source scan.

```
/*
 * Copyright (C) 2011 The Guava Authors
 *
 * Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except
 * in compliance with the License. You may obtain a copy of the License at
 *
 * http://www.apache.org/licenses/LICENSE-2.0
 *
 * Unless required by applicable law or agreed to in writing, software distributed under the License
 * is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either
 * express
 * or implied. See the License for the specific language governing permissions and limitations under
 * the License.
 */
```

Found in path(s):

```
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/cache/package-info.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/hash/AbstractHasher.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/util/concurrent/AbstractListeningExecutorService.java
*
 /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/primitives/UnsignedInts.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/primitives/UnsignedLongs.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/util/concurrent/ListeningScheduledExecutorService.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/hash/Crc32HashFunction.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/cache/CacheLoader.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/cache/AbstractCache.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/math/package-info.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/util/concurrent/AsyncFunction.java
*
 /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/hash/AbstractNonStreamingHashFunction.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/primitives/ParseRequest.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/hash/Funnel.java
```

* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
 jar/com/google/common/cache/RemovalNotification.java
 * /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
 jar/com/google/common/collect/TreeRangeSet.java
 * /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
 jar/com/google/common/cache/Weigher.java
 * /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
 jar/com/google/common/util/concurrent/Uninterruptibles.java
 *
 /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
 jar/com/google/common/net/HostAndPort.java
 * /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
 jar/com/google/common/hash/AbstractCompositeHashFunction.java
 * /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
 jar/com/google/common/hash/BloomFilterStrategies.java
 * /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
 jar/com/google/common/hash/HashCode.java
 * /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
 jar/com/google/common/util/concurrent/ExecutionError.java
 * /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
 jar/com/google/common/hash/MessageDigestHashFunction.java
 * /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
 jar/com/google/common/hash/Murmur3_128HashFunction.java
 * /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
 jar/com/google/common/math/IntMath.java
 *
 /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
 jar/com/google/common/hash/Hashing.java
 * /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
 jar/com/google/common/base/Optional.java
 * /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
 jar/com/google/common/util/concurrent/UncheckedExecutionException.java
 * /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
 jar/com/google/common/math/LongMath.java
 * /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
 jar/com/google/common/collect/BoundType.java
 * /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
 jar/com/google/common/primitives/UnsignedLong.java
 * /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
 jar/com/google/common/hash/BloomFilter.java
 * /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
 jar/com/google/common/util/concurrent/CycleDetectingLockFactory.java
 *
 /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
 jar/com/google/common/cache/RemovalListeners.java
 * /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
 jar/com/google/common/collect/Queues.java
 * /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-

```

jar/com/google/common/math/BigIntegerMath.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/cache/CacheBuilderSpec.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/net/HttpHeaders.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/util/concurrent/ForwardingExecutorService.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/DescendingImmutableSortedMultiset.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/base/Ticker.java
*
/opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/hash/HashingOutputStream.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/reflect/Types.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/hash/Funnels.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/util/concurrent/FutureCallback.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/cache/ForwardingLoadingCache.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/hash/PrimitiveSink.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/hash/HashFunction.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/math/DoubleMath.java
*
/opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/cache/RemovalListener.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/hash/Hasher.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/base/Enums.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/cache/LoadingCache.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/base/Present.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/math/MathPreconditions.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/AbstractSortedMultiset.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/util/concurrent/AbstractScheduledService.java
*
/opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/RegularContiguousSet.java

```

* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/cache/CacheStats.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/hash/AbstractStreamingHasher.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/cache/Cache.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/util/concurrent/AtomicLongMap.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/cache/RemovalCause.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/util/concurrent/WrappingExecutorService.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/base/PairwiseEquivalence.java
*
/opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/util/concurrent/ForwardingListeningExecutorService.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/cache/AbstractLoadingCache.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/base/Absent.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/cache/ForwardingCache.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/base/FunctionalEquivalence.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/hash/Murmur3_32HashFunction.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/math/DoubleUtils.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/collect/EmptyContiguousSet.java
*
/opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/reflect/TypeParameter.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/collect/RegularImmutableMultiset.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/primitives/UnsignedInteger.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/net/MediaType.java
No license file was found, but licenses were detected in source scan.

/*

* Copyright (C) 2017 The Guava Authors

*

* Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except

* in compliance with the License. You may obtain a copy of the License at

*

* <http://www.apache.org/licenses/LICENSE-2.0>
*
* Unless required by applicable law or agreed to in writing, software distributed under the License
* is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either
express
* or implied. See the License for the specific language governing permissions and limitations under
* the License.
*/

Found in path(s):

* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/hash/AbstractHashFunction.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/util/concurrent/ForwardingLock.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/util/concurrent/ForwardingCondition.java
*
/opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/primitives/ImmutableDoubleArray.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/primitives/ImmutableIntArray.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/primitives/ImmutableLongArray.java
No license file was found, but licenses were detected in source scan.

/*
* Copyright (C) 2014 The Guava Authors
*
* Licensed under the Apache License, Version 2.0 (the "License");
* you may not use this file except in compliance with the License.
* You may obtain a copy of the License at
*
* <http://www.apache.org/licenses/LICENSE-2.0>
*
* Unless required by applicable law or agreed to in writing, software
* distributed under the License is distributed on an "AS IS" BASIS,
* WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
* See the License for the specific language governing permissions and
* limitations under the License.
*/

Found in path(s):

* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/TopKSelector.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/graph/SuccessorsFunction.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/graph/Graph.java

*
/opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/graph/PredecessorsFunction.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/graph/ImmutableGraph.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/graph/Graphs.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/graph/MutableGraph.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/graph/Network.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/graph/MutableNetwork.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/graph/ImmutableNetwork.java

No license file was found, but licenses were detected in source scan.

/*
* Copyright (C) 2010 The Guava Authors
*
* Licensed under the Apache License, Version 2.0 (the "License");
* you may not use this file except in compliance with the License.
* You may obtain a copy of the License at
*
* <http://www.apache.org/licenses/LICENSE-2.0>
*
* Unless required by applicable law or agreed to in writing, software
* distributed under the License is distributed on an "AS IS" BASIS,
* WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
* See the License for the specific language governing permissions and
* limitations under the License.
*/

Found in path(s):

* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/collect/ForwardingSetMultimap.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/collect/ForwardingSortedSetMultimap.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/collect/RowSortedTable.java
*
/opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/collect/ForwardingImmutableCollection.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/collect/AbstractSequentialIterator.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/collect/UnmodifiableListIterator.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-

jar/com/google/common/collect/ForwardingListMultimap.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/MinMaxPriorityQueue.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/SortedMapDifference.java
No license file was found, but licenses were detected in source scan.

```
/*  
* Copyright (C) 2018 The Guava Authors  
*  
* Licensed under the Apache License, Version 2.0 (the "License");  
* you may not use this file except in compliance with the License.  
* You may obtain a copy of the License at  
*  
* http://www.apache.org/licenses/LICENSE-2.0  
*  
* Unless required by applicable law or agreed to in writing, software  
* distributed under the License is distributed on an "AS IS" BASIS,  
* WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.  
* See the License for the specific language governing permissions and  
* limitations under the License.  
*/
```

Found in path(s):

* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/IndexedImmutableSet.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/BaseImmutableMultimap.java
No license file was found, but licenses were detected in source scan.

```
/*  
* Copyright (C) 2011 The Guava Authors  
*  
* Licensed under the Apache License, Version 2.0 (the "License"); you may not  
* use this file except in compliance with the License. You may obtain a copy of  
* the License at  
*  
* http://www.apache.org/licenses/LICENSE-2.0  
*  
* Unless required by applicable law or agreed to in writing, software  
* distributed under the License is distributed on an "AS IS" BASIS, WITHOUT  
* WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the  
* License for the specific language governing permissions and limitations under  
* the License.  
*/
```

Found in path(s):

* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-

jar/com/google/common/collect/SortedMultiset.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/SortedMultisets.java
No license file was found, but licenses were detected in source scan.

```
/*
 * Copyright (C) 2009 The Guava Authors
 *
 * Licensed under the Apache License, Version 2.0 (the "License");
 * you may not use this file except in compliance with the License.
 * You may obtain a copy of the License at
 *
 * http://www.apache.org/licenses/LICENSE-2.0
 *
 * Unless required by applicable law or agreed to in writing, software
 * distributed under the License is distributed on an "AS IS" BASIS,
 * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
 * See the License for the specific language governing permissions and
 * limitations under the License.
 */
```

Found in path(s):

```
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-  
jar/com/google/common/collect/ImmutableClassToInstanceMap.java  
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-  
jar/com/google/common/collect/RegularImmutableSortedSet.java  
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-  
jar/com/google/common/collect/ArrayTable.java  
*  
/opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-  
jar/com/google/common/collect/ImmutableSortedMap.java  
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-  
jar/com/google/common/collect/ForwardingTable.java  
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-  
jar/com/google/common/collect/DiscreteDomain.java  
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-  
jar/com/google/common/collect/RegularImmutableList.java  
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-  
jar/com/google/common/collect/ImmutableSetMultimap.java  
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-  
jar/com/google/common/collect/ImmutableAsList.java  
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-  
jar/com/google/common/collect/SingletonImmutableTable.java  
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-  
jar/com/google/common/collect/EmptyImmutableSetMultimap.java  
*  
/opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-  
jar/com/google/common/collect/ImmutableSortedSetFauxverideShim.java
```

* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/collect/ComputationException.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/collect/ComparisonChain.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/collect/AbstractIndexedListIterator.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/collect/ImmutableEnumSet.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/collect/ImmutableTable.java

No license file was found, but licenses were detected in source scan.

/*

* Copyright (C) 2019 The Guava Authors

*

* Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except
* in compliance with the License. You may obtain a copy of the License at

*

* <http://www.apache.org/licenses/LICENSE-2.0>

*

* Unless required by applicable law or agreed to in writing, software distributed under the License
* is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either
express

* or implied. See the License for the specific language governing permissions and limitations under
* the License.

*/

Found in path(s):

* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/primitives/Platform.java

No license file was found, but licenses were detected in source scan.

/*

* Copyright (C) 2016 The Guava Authors

*

* Licensed under the Apache License, Version 2.0 (the "License");
* you may not use this file except in compliance with the License.

* You may obtain a copy of the License at

*

* <http://www.apache.org/licenses/LICENSE-2.0>

*

* Unless required by applicable law or agreed to in writing, software
* distributed under the License is distributed on an "AS IS" BASIS,
* WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.

* See the License for the specific language governing permissions and
* limitations under the License.

*/

Found in path(s):

* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/graph/AbstractNetwork.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/graph/UndirectedMultiNetworkConnections.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/collect/LinkedHashMapGwtSerializationDependencies.java
*
/opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/graph/UndirectedNetworkConnections.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/graph/DirectedMultiNetworkConnections.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/graph/MapIteratorCache.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/graph/ForwardingNetwork.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/graph/DirectedGraphConnections.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/graph/StandardValueGraph.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/collect/HashMapGwtSerializationDependencies.java
*
/opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/graph/NetworkBuilder.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/graph/EdgesConnecting.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/collect/ImmutableMultisetGwtSerializationDependencies.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/graph/ElementOrder.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/graph/StandardMutableGraph.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/graph/GraphConstants.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/graph/ImmutableValueGraph.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/graph/AbstractGraphBuilder.java
*
/opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/graph/NetworkConnections.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/graph/MutableValueGraph.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/graph/StandardMutableValueGraph.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-jar/com/google/common/graph/AbstractGraph.java

```

* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/graph/StandardNetwork.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/graph/MapRetrievalCache.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/graph/AbstractDirectedNetworkConnections.java
*
/opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/graph/UndirectedGraphConnections.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/graph/ValueGraph.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/graph/GraphBuilder.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/graph/EndpointPairIterator.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/Comparators.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/graph/DirectedNetworkConnections.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/graph/ForwardingGraph.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/graph/StandardMutableNetwork.java
*
/opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/graph/GraphConnections.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/graph/EndpointPair.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/RangeGwtSerializationDependencies.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/ArrayListMultimapGwtSerializationDependencies.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/graph/MultiEdgesConnecting.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/graph/AbstractUndirectedNetworkConnections.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/graph/ForwardingValueGraph.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/graph/AbstractValueGraph.java
*
/opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/graph/ValueGraphBuilder.java
No license file was found, but licenses were detected in source scan.

/*
* Copyright (C) 2006 The Guava Authors
*

```

* Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except
* in compliance with the License. You may obtain a copy of the License at
*
* <http://www.apache.org/licenses/LICENSE-2.0>
*
* Unless required by applicable law or agreed to in writing, software distributed under the License
* is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either
express
* or implied. See the License for the specific language governing permissions and limitations under
* the License.
*/

Found in path(s):

* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/util/concurrent/TimeoutFuture.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/util/concurrent/GwtFuturesCatchingSpecialization.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/annotations/VisibleForTesting.java
*
/opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/util/concurrent/GwtFluentFutureCatchingSpecialization.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/util/concurrent/FuturesGetChecked.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/util/concurrent/SimpleTimeLimiter.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/util/concurrent/FakeTimeLimiter.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/io/AppendableWriter.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/util/concurrent/Futures.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/reflect/TypeToken.java
*
/opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/escape/CharEscaperBuilder.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/util/concurrent/FluentFuture.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/util/concurrent/AbstractTransformFuture.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/util/concurrent/AbstractCatchingFuture.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/util/concurrent/AggregateFuture.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/escape/CharEscaper.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-

```
jar/com/google/common/util/concurrent/CollectionFuture.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/util/concurrent/ImmediateFuture.java
*
/opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/io/PatternFilenameFilter.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/util/concurrent/TimeLimiter.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/util/concurrent/UncheckedTimeoutException.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/base/CaseFormat.java
No license file was found, but licenses were detected in source scan.
```

```
/*
* Copyright (C) 2012 The Guava Authors
*
* Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except
* in compliance with the License. You may obtain a copy of the License at
*
* http://www.apache.org/licenses/LICENSE-2.0
*
* Unless required by applicable law or agreed to in writing, software distributed under the License
* is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either
express
* or implied. See the License for the specific language governing permissions and limitations under
* the License.
*/
/*
* This method was rewritten in Java from an intermediate step of the Murmur hash function in
* http://code.google.com/p/smhasher/source/browse/trunk/MurmurHash3.cpp, which contained the
* following header:
*
* MurmurHash3 was written by Austin Appleby, and is placed in the public domain. The author
* hereby disclaims
copyright to this source code.
*/
```

```
Found in path(s):
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/base/SmallCharMatcher.java
No license file was found, but licenses were detected in source scan.
```

```
/*
* Copyright (C) 2020 The Guava Authors
*
* Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except
* in compliance with the License. You may obtain a copy of the License at
```

```
*
* http://www.apache.org/licenses/LICENSE-2.0
*
* Unless required by applicable law or agreed to in writing, software distributed under the License
* is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either
express
* or implied. See the License for the specific language governing permissions and limitations under
* the License.
*/
/**
* Holder for web specializations of methods of { @code Shorts}. Intended to be empty for regular
* version.
*/
```

Found in path(s):

```
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/primitives/ShortsMethodsForWeb.java
No license file was found, but licenses were detected in source scan.
```

```
/*
* Copyright (C) 2019 The Guava Authors
*
* Licensed under the Apache License, Version 2.0 (the "License");
* you may not use this file except in compliance with the License.
* You may obtain a copy of the License at
*
* http://www.apache.org/licenses/LICENSE-2.0
*
* Unless required by applicable law or agreed to in writing, software
* distributed under the License is distributed on an "AS IS" BASIS,
* WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
* See the License for the specific language governing permissions and
* limitations under the License.
*/
```

Found in path(s):

```
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/graph/IncidentEdgeSet.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/CompactHashing.java
No license file was found, but licenses were detected in source scan.
```

```
/*
* Copyright (C) 2020 The Guava Authors
*
* Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except
* in compliance with the License. You may obtain a copy of the License at
*
*/
```



```
* http://www.apache.org/licenses/LICENSE-2.0
*
* Unless required by applicable law or agreed to in writing, software distributed under the License
* is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either
express
* or implied. See the License for the specific language governing permissions and limitations under
* the License.
*/
/**
* Holder for web specializations of methods of { @code Ints }. Intended to be empty for regular
* version.
*/
```

Found in path(s):

```
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/primitives/IntsMethodsForWeb.java
No license file was found, but licenses were detected in source scan.
```

```
/*
* Copyright (C) 2007 The Guava Authors
*
* Licensed under the Apache License, Version 2.0 (the "License");
* you may not use this file except in compliance with the License.
* You may obtain a copy of the License at
*
* http://www.apache.org/licenses/LICENSE-2.0
*
* Unless required by applicable law or agreed to in writing, software
* distributed under the License is distributed on an "AS IS" BASIS,
* WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
* See the License for the specific language governing permissions and
* limitations under the License.
*/
```

Found in path(s):

```
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/EnumBiMap.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/ForwardingSet.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/ForwardingSortedSet.java
*
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/ImmutableList.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/ForwardingCollection.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/AbstractSetMultimap.java
```

```

* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/Multisets.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/Ordering.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/NullsLastOrdering.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/ImmutableSet.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/ForwardingMapEntry.java
*
/opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/ClassToInstanceMap.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/AbstractMapEntry.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/SingletonImmutableSet.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/ListMultimap.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/SortedSetMultimap.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/TreeMultiset.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/LinkedListMultimap.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/Interner.java
*
/opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/UsingToStringOrdering.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/AbstractIterator.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/Maps.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/ForwardingIterator.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/ComparatorOrdering.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/ForwardingMap.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/ForwardingSortedMap.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/SetMultimap.java
*
/opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/Lists.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-

```

```

jar/com/google/common/collect/ForwardingMultiset.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/ForwardingMultimap.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/Multiset.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/MutableClassToInstanceMap.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/RegularImmutableSet.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/package-info.java
*
/opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/ForwardingQueue.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/AbstractBiMap.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/AbstractMapBasedMultiset.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/ExplicitOrdering.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/Iterators.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/LinkedHashMultimap.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/ConcurrentHashMultiset.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/Multimap.java
*
/opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/LexicographicalOrdering.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/ForwardingConcurrentMap.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/ForwardingObject.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/BiMap.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/Iterables.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/AbstractSortedSetMultimap.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/MapDifference.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/AbstractListMultimap.java
*
/opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/HashMultimap.java

```

```

* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/Multimaps.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/ReverseNaturalOrdering.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/AbstractMultiset.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/Sets.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/ForwardingListIterator.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/Synchronized.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/CompoundOrdering.java
*
/opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/NaturalOrdering.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/ReverseOrdering.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/ArrayListMultimap.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/ByFunctionOrdering.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/NullsFirstOrdering.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/ForwardingList.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/TreeMultimap.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/HashMultiset.java
*
/opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/AbstractMapBasedMultimap.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/EnumHashBiMap.java
* /opt/cola/permits/1148655839_1618904031.03/0/guava-30-1-1-android-sources-
jar/com/google/common/collect/LinkedHashMultiset.java

```

1.17 jsoup 1.14.2

1.17.1 Available under license :

The MIT License

Copyright (c) 2009-2021 Jonathan Hedley <<https://jsoup.org/>>

Permission is hereby granted, free of charge, to any person obtaining a copy

of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

1.18 libcxx 9.0.9svn

1.18.1 Available under license :

=====
libcxx License
=====

The libcxx library is dual licensed under both the University of Illinois "BSD-Like" license and the MIT license. As a user of this code you may choose to use it under either license. As a contributor, you agree to allow your code to be used under both.

Full text of the relevant licenses is included below.

=====
University of Illinois/NCSA
Open Source License

Copyright (c) 2009-2017 by the contributors listed in CREDITS.TXT

All rights reserved.

Developed by:

LLVM Team

University of Illinois at Urbana-Champaign

<http://llvm.org>

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal with the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

- * Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimers.
- * Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimers in the documentation and/or other materials provided with the distribution.
- * Neither the names of the LLVM Team, University of Illinois at Urbana-Champaign, nor the names of its contributors may be used to endorse or promote products derived from this Software without specific prior written permission.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE CONTRIBUTORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS WITH THE SOFTWARE.

=====

Copyright (c) 2009-2014 by the contributors listed in CREDITS.TXT

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY,

FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

Apache License
Version 2.0, January 2004
<http://www.apache.org/licenses/>

TERMS AND CONDITIONS FOR USE, REPRODUCTION, AND DISTRIBUTION

1. Definitions.

"License" shall mean the terms and conditions for use, reproduction, and distribution as defined by Sections 1 through 9 of this document.

"Licensor" shall mean the copyright owner or entity authorized by the copyright owner that is granting the License.

"Legal Entity" shall mean the union of the acting entity and all other entities that control, are controlled by, or are under common control with that entity. For the purposes of this definition, "control" means (i) the power, direct or indirect, to cause the direction or management of such entity, whether by contract or otherwise, or (ii) ownership of fifty percent (50%) or more of the outstanding shares, or (iii) beneficial ownership of such entity.

"You" (or "Your") shall mean an individual or Legal Entity exercising permissions granted by this License.

"Source" form shall mean the preferred form for making modifications, including but not limited to software source code, documentation source, and configuration files.

"Object" form shall mean any form resulting from mechanical transformation or translation of a Source form, including but not limited to compiled object code, generated documentation, and conversions to other media types.

"Work" shall mean the work of authorship, whether in Source or Object form, made available under the License, as indicated by a copyright notice that is included in or attached to the work (an example is provided in the Appendix below).

"Derivative Works" shall mean any work, whether in Source or Object form, that is based on (or derived from) the Work and for which the

editorial
revisions, annotations, elaborations, or other modifications
represent, as a whole, an original work of authorship. For the purposes
of this License, Derivative Works shall not include works that remain
separable from, or merely link (or bind by name) to the interfaces of,
the Work and Derivative Works thereof.

"Contribution" shall mean any work of authorship, including
the original version of the Work and any modifications or additions
to that Work or Derivative Works thereof, that is intentionally
submitted to Licensor for inclusion in the Work by the copyright owner
or by an individual or Legal Entity authorized to submit on behalf of
the copyright owner. For the purposes of this definition, "submitted"
means any form of electronic, verbal, or written communication sent
to the Licensor or its representatives, including but not limited to
communication on electronic mailing lists, source code control systems,
and issue tracking systems that are managed by, or on behalf of, the
Licensor for the purpose of discussing and improving the Work, but
excluding communication that is conspicuously marked or otherwise
designated in writing by the copyright owner as "Not a Contribution."

"Contributor" shall mean Licensor and any individual or Legal Entity
on behalf of whom a Contribution has been received by Licensor and
subsequently incorporated within the Work.

2. Grant of Copyright License. Subject to the terms and conditions of
this License, each Contributor hereby grants to You a perpetual,
worldwide, non-exclusive, no-charge, royalty-free, irrevocable
copyright license to reproduce, prepare Derivative Works of,
publicly display, publicly perform, sublicense, and distribute the
Work and such Derivative Works in Source or Object form.

3. Grant of Patent License. Subject to the terms and conditions of
this

License, each Contributor hereby grants to You a perpetual,
worldwide, non-exclusive, no-charge, royalty-free, irrevocable
(except as stated in this section) patent license to make, have made,
use, offer to sell, sell, import, and otherwise transfer the Work,
where such license applies only to those patent claims licensable
by such Contributor that are necessarily infringed by their
Contribution(s) alone or by combination of their Contribution(s)
with the Work to which such Contribution(s) was submitted. If You
institute patent litigation against any entity (including a
cross-claim or counterclaim in a lawsuit) alleging that the Work
or a Contribution incorporated within the Work constitutes direct
or contributory patent infringement, then any patent licenses
granted to You under this License for that Work shall terminate
as of the date such litigation is filed.

4. Redistribution. You may reproduce and distribute copies of the Work or Derivative Works thereof in any medium, with or without modifications, and in Source or Object form, provided that You meet the following conditions:

- (a) You must give any other recipients of the Work or Derivative Works a copy of this License; and
- (b) You must cause any modified files to carry prominent notices stating that You changed the files; and
- (c) You must retain, in the Source form of any Derivative Works that You distribute, all copyright, patent, trademark, and attribution notices from the Source form of the Work, excluding those notices that do not pertain to any part of the Derivative Works; and
- (d) If the Work includes a "NOTICE" text file as part of its distribution, then any Derivative Works that You distribute must include a readable copy of the attribution notices contained within such NOTICE file, excluding those notices that do not pertain to any part of the Derivative Works, in at least one of the following places: within a NOTICE text file distributed as part of the Derivative Works; within the Source form or documentation, if provided along with the Derivative Works; or, within a display generated by the Derivative Works, if and wherever such third-party notices normally appear. The contents of the NOTICE file are for informational purposes only and do not modify the License. You may add Your own attribution notices within Derivative Works that You distribute, alongside or as an addendum to the NOTICE text from the Work, provided that such additional attribution notices cannot be construed as modifying the License.

You may add Your own copyright statement to Your modifications and may provide additional or different license terms and conditions

for use, reproduction, or distribution of Your modifications, or for any such Derivative Works as a whole, provided Your use, reproduction, and distribution of the Work otherwise complies with the conditions stated in this License.

5. Submission of Contributions. Unless You explicitly state otherwise, any Contribution intentionally submitted for inclusion in the Work by You to the Licensor shall be under the terms and conditions of

this License, without any additional terms or conditions.

Notwithstanding the above, nothing herein shall supersede or modify the terms of any separate license agreement you may have executed with Licensor regarding such Contributions.

6. Trademarks. This License does not grant permission to use the trade names, trademarks, service marks, or product names of the Licensor, except as required for reasonable and customary use in describing the origin of the Work and reproducing the content of the NOTICE file.

7. Disclaimer of Warranty. Unless required by applicable law or agreed to in writing, Licensor provides the Work (and each Contributor provides its Contributions) on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied, including, without limitation, any warranties or conditions of TITLE, NON-INFRINGEMENT, MERCHANTABILITY, or FITNESS FOR A PARTICULAR PURPOSE. You are solely responsible for determining the appropriateness of using or redistributing the Work and assume any risks associated with Your exercise of permissions under this License.

8. Limitation of Liability. In no event and under no legal theory, whether in tort (including negligence), contract, or otherwise, unless required by applicable law (such as deliberate and grossly negligent acts) or agreed to in writing, shall any Contributor be liable to You for damages, including any direct, indirect, special, incidental, or consequential damages of any character arising as a result of this License or out of the use or inability to use the Work (including but not limited to damages for loss of goodwill, work stoppage, computer failure or malfunction, or any and all other commercial damages or losses), even if such Contributor has been advised of the possibility of such damages.

9. Accepting Warranty or Additional Liability. While redistributing the Work or Derivative Works thereof, You may choose to offer, and charge a fee for, acceptance of support, warranty, indemnity, or other liability obligations and/or rights consistent with this License. However, in accepting such obligations, You may act only on Your own behalf and on Your sole responsibility, not on behalf of any other Contributor, and only if You agree to indemnify, defend, and hold each Contributor harmless for any liability incurred by, or claims asserted against, such Contributor by reason of your accepting any such warranty or additional liability.

END OF TERMS AND CONDITIONS

APPENDIX: How to apply the Apache License to your work.

To apply the Apache License to your work, attach the following boilerplate notice, with the fields enclosed by brackets "[]" replaced with your own identifying information. (Don't include the brackets!) The text should be enclosed in the appropriate comment syntax for the file format. We also recommend that a file or class name and description of purpose be included on the same "printed page" as the copyright notice for easier identification within third-party archives.

Copyright [yyyy] [name of copyright owner]

Licensed under the Apache License, Version 2.0 (the "License");
you may not use this file except in compliance with the License.
You may obtain a copy of the License at

<http://www.apache.org/licenses/LICENSE-2.0>

Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License.

```
# People who have agreed to one of the CLAs and can contribute patches.  
# The AUTHORS file lists the copyright holders; this file  
# lists people. For example, Google employees are listed here  
# but not in AUTHORS, because Google holds the copyright.  
#  
# Names should be added to this file only after verifying that  
# the individual or the individual's organization has agreed to  
# the appropriate Contributor License Agreement, found here:  
#  
# https://developers.google.com/open-source/cla/individual  
# https://developers.google.com/open-source/cla/corporate  
#  
# The agreement for individuals can be filled out on the web.  
#  
# When adding J Random Contributor's name to this file,  
# either J's name or J's organization's name should be  
# added to the AUTHORS file, depending on whether the  
# individual or corporate CLA was used.  
#  
# Names should be added to this file as:  
# Name <email address>  
#  
# Please keep the list sorted.
```

Albert Pretorius <pretoalb@gmail.com>

Arne Beer <arne@twobeer.de>
Billy
Robert O'Neal III <billy.oneal@gmail.com> <bion@microsoft.com>
Chris Kennelly <ckennelly@google.com> <ckennelly@ckennelly.com>
Christopher Seymour <chris.j.seymour@hotmail.com>
Cyrille Faucheux <cyrille.faucheux@gmail.com>
David Coeurjolly <david.coeurjolly@liris.cnrs.fr>
Deniz Evrenci <denizevrenci@gmail.com>
Dominic Hamon <dma@stripsock.com> <dominic@google.com>
Dominik Czarnota <dominik.b.czarnota@gmail.com>
Eric Fiselier <eric@efcs.ca>
Eugene Zhuk <eugene.zhuk@gmail.com>
Evgeny Safronov <division494@gmail.com>
Federico Ficarelli <federico.ficarelli@gmail.com>
Felix Homann <linuxaudio@showlabor.de>
Ismael Jimenez Martinez <ismael.jimenez.martinez@gmail.com>
Jern-Kuan Leong <jernkuan@gmail.com>
JianXiong Zhou <zhoujianxiong2@gmail.com>
Joao Paulo Magalhaes <joaoppmagalhaes@gmail.com>
John Millikin <jmillikin@stripe.com>
Jussi Knuutila <jussi.knuutila@gmail.com>
Kai Wolf <kai.wolf@gmail.com>
Kishan Kumar <kumar.kishan@outlook.com>
Kaito Udagawa <umireon@gmail.com>
Lei Xu <eddyxu@gmail.com>
Matt
Clarkson <mattyclarkson@gmail.com>
Maxim Vafin <maxvafin@gmail.com>
Nick Hutchinson <nshutchinson@gmail.com>
Oleksandr Sochka <sasha.sochka@gmail.com>
Ori Livneh <ori.livneh@gmail.com>
Pascal Leroy <phl@google.com>
Paul Redmond <paul.redmond@gmail.com>
Pierre Phaneuf <pphaneuf@google.com>
Radoslav Yovchev <radoslav.tm@gmail.com>
Raul Marin <rmrodriguez@cartodb.com>
Ray Glover <ray.glover@uk.ibm.com>
Robert Guo <robert.guo@mongodb.com>
Roman Lebedev <lebedev.ri@gmail.com>
Shuo Chen <chenshuo@chenshuo.com>
Tobias Ulvgrd <tobias.ulvgard@dirac.se>
Tom Madams <tom.ej.madams@gmail.com> <tmadams@google.com>
Yixuan Qiu <yixuanq@gmail.com>
Yusuke Suzuki <utatane.tea@gmail.com>
Zbigniew Skowron <zbychs@gmail.com>

1.19 libcxxabi 9.0.9svn

1.19.1 Available under license :

=====
libcxxabi License
=====

The libcxxabi library is dual licensed under both the University of Illinois "BSD-Like" license and the MIT license. As a user of this code you may choose to use it under either license. As a contributor, you agree to allow your code to be used under both.

Full text of the relevant licenses is included below.

=====
University of Illinois/NCSA
Open Source License

Copyright (c) 2009-2018 by the contributors listed in CREDITS.TXT

All rights reserved.

Developed by:

LLVM Team

University of Illinois at Urbana-Champaign

<http://llvm.org>

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal with the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

- * Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimers.
- * Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimers in the documentation and/or other materials provided with the distribution.
- * Neither the names of the LLVM Team, University of Illinois at

Urbana-Champaign, nor the names of its contributors may be used to endorse or promote products derived from this Software without specific prior written permission.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS

FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE CONTRIBUTORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS WITH THE SOFTWARE.

=====
Copyright (c) 2009-2014 by the contributors listed in CREDITS.TXT

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

=====
libc++abi License
=====

The libc++abi library is dual licensed under both the University of Illinois "BSD-Like" license and the MIT license. As a user of this code you may choose to use it under either license. As a contributor, you agree to allow your code to be used under both.

Full text of the relevant licenses is included below.

University of Illinois/NCSA
Open Source License

Copyright (c) 2009-2014 by the contributors listed in CREDITS.TXT

All rights reserved.

Developed by:

LLVM Team

University of Illinois at Urbana-Champaign

<http://llvm.org>

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal with the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

- * Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimers.
- * Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimers in the documentation and/or other materials provided with the distribution.
- * Neither the names of the LLVM Team, University of Illinois at Urbana-Champaign, nor the names of its contributors may be used to endorse or promote products derived from this Software without specific prior written permission.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE CONTRIBUTORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS WITH THE SOFTWARE.

=====

Copyright (c) 2009-2014 by the contributors listed in CREDITS.TXT

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

1.20 google-play-services 18.0.1

1.20.1 Available under license :

AndroidX lifecycle common library, AndroidX lifecycle livedatacore library, AndroidX lifecycle runtime library:

Copyright (c) 2005-2011, The Android Open Source Project

Licensed under the Apache License, Version 2.0 (the "License");
you may not use this file except in compliance with the License.

Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License.

Apache License
Version 2.0, January 2004
<http://www.apache.org/licenses/>

TERMS AND CONDITIONS FOR USE, REPRODUCTION, AND DISTRIBUTION

1. Definitions.

"License" shall mean the terms and conditions for use, reproduction, and distribution as defined by Sections 1 through 9 of this document.

"Licensor" shall mean the copyright owner or entity authorized by the copyright owner that is granting the License.

"Legal Entity" shall mean the union of the acting entity and all other entities that control, are controlled by, or are under common control with that entity. For the purposes of this definition, "control" means (i) the power, direct or indirect, to cause the direction or management of such entity, whether by contract or otherwise, or (ii) ownership of fifty percent (50%) or more of the outstanding shares, or (iii) beneficial ownership of such entity.

"You" (or "Your") shall mean an individual or Legal Entity exercising permissions granted by this License.

"Source" form shall mean the preferred form for making modifications, including but not limited to software source code, documentation source, and configuration files.

"Object" form shall mean any form resulting from mechanical transformation or translation of a Source form, including but not limited to compiled object code, generated documentation, and conversions to other media types.

"Work" shall mean the work of authorship, whether in Source or Object form, made available under the License, as indicated by a copyright notice that is included in or attached to the work (an example is provided in the Appendix below).

"Derivative Works" shall mean any work, whether in Source or Object form, that is based on (or derived from) the Work and for which the editorial revisions, annotations, elaborations, or other modifications represent, as a whole, an original work of authorship. For the purposes of this License, Derivative Works shall not include works that remain separable from, or merely link (or bind by name) to the interfaces of, the Work and Derivative Works thereof.

"Contribution" shall mean any work of authorship, including the original version of the Work and any modifications or additions to that Work or Derivative Works thereof, that is intentionally submitted to Licensor for inclusion in the Work by the copyright owner or by an individual or Legal Entity authorized to submit on behalf of the copyright owner. For the purposes of this definition, "submitted"

means any form of electronic, verbal, or written communication sent to the Licensor or its representatives, including but not limited to communication on electronic mailing lists, source code control systems, and issue tracking systems that are managed by, or on behalf of, the Licensor for the purpose of discussing and improving the Work, but excluding communication that is conspicuously marked or otherwise designated in writing by the copyright owner as "Not a Contribution."

"Contributor" shall mean Licensor and any individual or Legal Entity on behalf of whom a Contribution has been received by Licensor and subsequently incorporated within the Work.

2. Grant of Copyright License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable copyright license to reproduce, prepare Derivative Works of, publicly display, publicly perform, sublicense, and distribute the Work and such Derivative Works in Source or Object form.

3. Grant of Patent License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable (except as stated in this section) patent license to make, have made, use, offer to sell, sell, import, and otherwise transfer the Work, where such license applies only to those patent claims licensable by such Contributor

that are necessarily infringed by their

Contribution(s) alone or by combination of their Contribution(s) with the Work to which such Contribution(s) was submitted. If You institute patent litigation against any entity (including a cross-claim or counterclaim in a lawsuit) alleging that the Work or a Contribution incorporated within the Work constitutes direct or contributory patent infringement, then any patent licenses granted to You under this License for that Work shall terminate as of the date such litigation is filed.

4. Redistribution. You may reproduce and distribute copies of the Work or Derivative Works thereof in any medium, with or without modifications, and in Source or Object form, provided that You meet the following conditions:

(a) You must give any other recipients of the Work or Derivative Works a copy of this License; and

(b) You must cause any modified files to carry prominent notices stating that You changed the files; and

- (c) You must retain, in the Source form of any Derivative Works that You distribute, all copyright, patent, trademark, and attribution notices from the Source form of the Work, excluding those notices that do not pertain to any part of the Derivative Works; and
- (d) If the Work includes a "NOTICE" text file as part of its distribution, then any Derivative Works that You distribute must include a readable copy of the attribution notices contained within such NOTICE file, excluding those notices that do not pertain to any part of the Derivative Works, in at least one of the following places: within a NOTICE text file distributed as part of the Derivative Works; within the Source form or documentation, if provided along with the Derivative Works; or, within a display generated by the Derivative Works, if and wherever such third-party notices normally appear. The contents of the NOTICE file are for informational purposes only and do not modify the License. You may add Your own attribution notices within Derivative Works that You distribute, alongside or as an addendum to the NOTICE text from the Work, provided that such additional attribution notices cannot be construed as modifying the License.

You may add Your own copyright statement to Your modifications and may provide additional or different license terms and conditions for use, reproduction, or distribution of Your modifications, or for any such Derivative Works as a whole, provided Your use, reproduction, and distribution of the Work otherwise complies with the conditions stated in this License.

5. Submission of Contributions. Unless You explicitly state otherwise, any Contribution intentionally submitted for inclusion in the Work

by You to the Licensor shall be under the terms and conditions of this License, without any additional terms or conditions.

Notwithstanding the above, nothing herein shall supersede or modify the terms of any separate license agreement you may have executed with Licensor regarding such Contributions.

6. Trademarks. This License does not grant permission to use the trade names, trademarks, service marks, or product names of the Licensor, except as required for reasonable and customary use in describing the origin of the Work and reproducing the content of the NOTICE file.

7. Disclaimer of Warranty. Unless required by applicable law or agreed to in writing, Licensor provides the Work (and each

Contributor provides its Contributions) on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied, including, without limitation, any warranties or conditions of TITLE, NON-INFRINGEMENT, MERCHANTABILITY, or FITNESS FOR A PARTICULAR PURPOSE. You are solely responsible for determining the appropriateness of using or redistributing the Work and assume any risks associated with Your exercise of permissions under this License.

8. Limitation of Liability. In no event and under no legal theory, whether in tort (including negligence), contract, or otherwise, unless required by applicable law (such as deliberate and grossly negligent acts) or agreed to in writing, shall any Contributor be liable to You for damages, including any direct, indirect, special, incidental, or consequential damages of any character arising as a result of this License or out of the use or inability to use the Work (including but not limited to damages for loss of goodwill, work stoppage, computer failure or malfunction, or any and all other commercial damages or losses), even if such

Contributor

has been advised of the possibility of such damages.

9. Accepting Warranty or Additional Liability. While redistributing the Work or Derivative Works thereof, You may choose to offer, and charge a fee for, acceptance of support, warranty, indemnity, or other liability obligations and/or rights consistent with this License. However, in accepting such obligations, You may act only on Your own behalf and on Your sole responsibility, not on behalf of any other Contributor, and only if You agree to indemnify, defend, and hold each Contributor harmless for any liability incurred by, or claims asserted against, such Contributor by reason of your accepting any such warranty or additional liability.

END OF TERMS AND CONDITIONS

apksig:

Copyright (c) 2005-2008, The Android Open Source Project

Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License.

Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and

limitations under the License.

Apache License
Version 2.0, January 2004
<http://www.apache.org/licenses/>

TERMS AND CONDITIONS FOR USE, REPRODUCTION, AND DISTRIBUTION

1. Definitions.

"License" shall mean the terms and conditions for use, reproduction, and distribution as defined by Sections 1 through 9 of this document.

"Licensor" shall mean the copyright owner or entity authorized by the copyright owner that is granting the License.

"Legal Entity" shall mean the union of the acting entity and all other entities that control, are controlled by, or are under common control with that entity. For the purposes of this definition, "control" means (i) the power, direct or indirect, to cause the direction or management of such entity, whether by contract or otherwise, or (ii) ownership of fifty percent (50%) or more of the outstanding shares, or (iii) beneficial ownership of such entity.

"You" (or "Your") shall mean an individual or Legal Entity exercising permissions granted by this License.

"Source" form shall mean the preferred form for making modifications, including but not limited to software source code, documentation source, and configuration files.

"Object" form shall mean any form resulting from mechanical transformation or translation of a Source form, including but not limited to compiled object code, generated documentation, and conversions to other media types.

"Work" shall mean the work of authorship, whether in Source or Object form, made available under the License, as indicated by a copyright notice that is included in or attached to the work (an example is provided in the Appendix below).

"Derivative Works" shall mean any work, whether in Source or Object form, that is based on (or derived from) the Work and for which the editorial revisions, annotations, elaborations, or other modifications represent, as a whole, an original work of authorship. For the purposes

of this License, Derivative Works shall not include works that remain separable from, or merely link (or bind by name) to the interfaces of, the Work and Derivative Works thereof.

"Contribution" shall mean any work of authorship, including the original version of the Work and any modifications or additions to that Work or Derivative Works thereof, that is intentionally submitted to Licensor for inclusion in the Work by the copyright owner or by an individual or Legal

Entity authorized to submit on behalf of

the copyright owner. For the purposes of this definition, "submitted" means any form of electronic, verbal, or written communication sent to the Licensor or its representatives, including but not limited to communication on electronic mailing lists, source code control systems, and issue tracking systems that are managed by, or on behalf of, the Licensor for the purpose of discussing and improving the Work, but excluding communication that is conspicuously marked or otherwise designated in writing by the copyright owner as "Not a Contribution."

"Contributor" shall mean Licensor and any individual or Legal Entity on behalf of whom a Contribution has been received by Licensor and subsequently incorporated within the Work.

2. Grant of Copyright License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide,

non-exclusive, no-charge, royalty-free, irrevocable

copyright license to reproduce, prepare Derivative Works of, publicly display, publicly perform, sublicense, and distribute the Work and such Derivative Works in Source or Object form.

3. Grant of Patent License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable (except as stated in this section) patent license to make, have made, use, offer to sell, sell, import, and otherwise transfer the Work, where such license applies only to those patent claims licensable by such Contributor that are necessarily infringed by their Contribution(s) alone or by combination of their Contribution(s) with the Work to which such Contribution(s) was submitted. If You institute patent litigation against any entity (including a cross-claim or counterclaim in

a lawsuit) alleging that the Work

or a Contribution incorporated within the Work constitutes direct or contributory patent infringement, then any patent licenses granted to You under this License for that Work shall terminate as of the date such litigation is filed.

4. Redistribution. You may reproduce and distribute copies of the Work or Derivative Works thereof in any medium, with or without modifications, and in Source or Object form, provided that You meet the following conditions:

- (a) You must give any other recipients of the Work or Derivative Works a copy of this License; and
- (b) You must cause any modified files to carry prominent notices stating that You changed the files; and
- (c) You must retain, in the Source form of any Derivative Works that You distribute, all copyright, patent, trademark, and attribution notices from the Source form of the Work, excluding those notices that do not pertain to any part of the Derivative Works; and
- (d) If the Work includes a "NOTICE" text file as part of its distribution, then any Derivative Works that You distribute must include a readable copy of the attribution notices contained within such NOTICE file, excluding those notices that do not pertain to any part of the Derivative Works, in at least one of the following places: within a NOTICE text file distributed as part of the Derivative Works; within the Source form or documentation, if provided along with the Derivative Works; or, within a display generated by the Derivative Works, if and wherever such third-party notices normally appear. The contents of the NOTICE file are for informational purposes only and do not modify the License. You may add Your own attribution notices within Derivative Works that You distribute, alongside or as an addendum to the NOTICE text from the Work, provided that such additional attribution notices cannot be construed as modifying the License.

You may add Your own copyright statement to Your modifications and may provide additional or different license terms and conditions for use, reproduction, or distribution of Your modifications, or for any such Derivative Works as a whole, provided Your use, reproduction, and distribution of the Work otherwise complies with the conditions stated in this License.

5. Submission of Contributions. Unless You explicitly state otherwise, any Contribution intentionally submitted for inclusion in the Work by You to the Licensor shall be under the terms and conditions of this License, without any additional terms or conditions.

Notwithstanding the above, nothing herein shall supersede or modify

the terms of any separate license agreement
you may have executed
with Licensor regarding such Contributions.

6. Trademarks. This License does not grant permission to use the trade names, trademarks, service marks, or product names of the Licensor, except as required for reasonable and customary use in describing the origin of the Work and reproducing the content of the NOTICE file.

7. Disclaimer of Warranty. Unless required by applicable law or agreed to in writing, Licensor provides the Work (and each Contributor provides its Contributions) on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied, including, without limitation, any warranties or conditions of TITLE, NON-INFRINGEMENT, MERCHANTABILITY, or FITNESS FOR A PARTICULAR PURPOSE. You are solely responsible for determining the appropriateness of using or redistributing the Work and assume any risks associated with Your exercise of permissions under this License.

8. Limitation of Liability. In no event and under no legal theory, whether in tort (including negligence), contract, or otherwise, unless required by applicable law (such as deliberate and grossly negligent acts) or agreed to in writing, shall any Contributor be liable to You for damages, including any direct, indirect, special, incidental, or consequential damages of any character arising as a result of this License or out of the use or inability to use the Work (including but not limited to damages for loss of goodwill, work stoppage, computer failure or malfunction, or any and all other commercial damages or losses), even if such Contributor has been advised of the possibility of such damages.

9. Accepting Warranty or Additional Liability. While redistributing the Work or Derivative Works thereof, You may choose to offer, and charge a fee for, acceptance of support, warranty, indemnity, or other

liability obligations and/or rights consistent with this

License. However, in accepting such obligations, You may act only on Your own behalf and on Your sole responsibility, not on behalf of any other Contributor, and only if You agree to indemnify, defend, and hold each Contributor harmless for any liability incurred by, or claims asserted against, such Contributor by reason of your accepting any such warranty or additional liability.

END OF TERMS AND CONDITIONS

Animal Sniffer:

The MIT License

Copyright (c) 2008 Kohsuke Kawaguchi and codehaus.org.

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

Checker Framework Annotations:

A few parts of the Checker Framework have more permissive licenses.

* The annotations are licensed under the MIT License. (The text of this license appears below.) More specifically, all the parts of the Checker Framework that you might want to include with your own program use the MIT License. This is the checker-qual.jar file and all the files that appear in it: every file in a qual/ directory, plus utility files such as NullnessUtil.java, RegexUtil.java, SignednessUtil.java, etc. In addition, the cleanroom implementations of third-party annotations, which the Checker Framework recognizes as aliases for its own annotations, are licensed under the MIT License.

=====

MIT License:

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell

copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

=====
Error Prone:

Apache License
Version 2.0, January 2004
<http://www.apache.org/licenses/>

TERMS AND CONDITIONS FOR USE, REPRODUCTION, AND DISTRIBUTION

1. Definitions.

"License" shall mean the terms and conditions for use, reproduction, and distribution as defined by Sections 1 through 9 of this document.

"Licensor" shall mean the copyright owner or entity authorized by the copyright owner that is granting the License.

"Legal Entity" shall mean the union of the acting entity and all other entities that control, are controlled by, or are under common control with that entity. For the purposes of this definition, "control" means (i) the power, direct or indirect, to cause the direction or management of such entity, whether by contract or otherwise, or (ii) ownership of fifty percent (50%) or more of the outstanding shares, or (iii) beneficial ownership of such entity.

"You" (or "Your") shall mean an individual or Legal Entity exercising permissions granted by this License.

"Source" form shall mean the preferred form for making modifications, including but not limited to software source code, documentation

source, and configuration files.

"Object" form shall mean any form resulting from mechanical transformation or translation of a Source form, including but not limited to compiled object code, generated documentation, and conversions to other media types.

"Work" shall mean the work of authorship, whether in Source or Object form, made available under the License, as indicated by a copyright notice that is included in or attached to the work (an example is provided in the Appendix below).

"Derivative Works" shall mean any work, whether in Source or Object form, that is based on (or derived from) the Work and for which the editorial revisions, annotations, elaborations, or other modifications represent, as a whole, an original work of authorship. For the purposes of this License, Derivative Works shall not include works that remain separable from, or merely link (or bind by name) to the interfaces of, the Work and Derivative Works thereof.

"Contribution" shall mean any work of authorship, including the original version of the Work and any modifications or additions to that Work or Derivative Works thereof, that is intentionally submitted to Licensor for inclusion in the Work by the copyright owner or by an individual or Legal Entity authorized to submit on behalf of the copyright owner. For the purposes of this definition, "submitted" means any form of electronic, verbal, or written communication sent to the Licensor or its representatives, including but not limited to communication on electronic mailing lists, source code control systems, and issue tracking systems that are managed by, or on behalf of, the Licensor for the purpose of discussing and improving the Work, but excluding communication that is conspicuously marked or otherwise designated in writing by the copyright owner as "Not a Contribution."

"Contributor" shall mean Licensor and any individual or Legal Entity on behalf of whom a Contribution has been received by Licensor and subsequently incorporated within the Work.

2. Grant of Copyright License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable copyright license to reproduce, prepare Derivative Works of, publicly display, publicly perform, sublicense, and distribute the Work and such Derivative Works in Source or Object form.

3. Grant of Patent License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable (except as stated in this section) patent license to make, have made, use, offer to sell, sell, import, and otherwise transfer the Work, where such license applies only to those patent claims licensable by such Contributor that are necessarily infringed by their Contribution(s) alone or by combination of their Contribution(s) with the Work to which such Contribution(s) was submitted. If You institute patent litigation against any entity (including a cross-claim or counterclaim in a lawsuit) alleging that the Work or a Contribution incorporated within the Work constitutes direct or contributory patent infringement, then any patent licenses granted to You under this License for that Work shall terminate as of the date such litigation is filed.

4. Redistribution. You may reproduce and distribute copies of the Work or Derivative Works thereof in any medium, with or without modifications, and in Source or Object form, provided that You meet the following conditions:

- (a) You must give any other recipients of the Work or Derivative Works a copy of this License; and
- (b) You must cause any modified files to carry prominent notices stating that You changed the files;
and
- (c) You must retain, in the Source form of any Derivative Works that You distribute, all copyright, patent, trademark, and attribution notices from the Source form of the Work, excluding those notices that do not pertain to any part of the Derivative Works; and
- (d) If the Work includes a "NOTICE" text file as part of its distribution, then any Derivative Works that You distribute must include a readable copy of the attribution notices contained within such NOTICE file, excluding those notices that do not pertain to any part of the Derivative Works, in at least one of the following places: within a NOTICE text file distributed as part of the Derivative Works; within the Source form or documentation, if provided along with the Derivative Works; or, within a display generated by the Derivative Works, if and wherever such third-party notices normally appear. The contents of the NOTICE file are for informational purposes only and do not modify the License. You may add Your own attribution

notices within Derivative Works that You distribute, alongside or as an addendum to the NOTICE text from the Work, provided that such additional attribution notices cannot be construed as modifying the License.

You may add Your own copyright statement to Your modifications and may provide additional or different license terms and conditions for use, reproduction, or distribution of Your modifications, or for any such Derivative Works as a whole, provided Your use, reproduction, and distribution of the Work otherwise complies with the conditions stated in this License.

5. Submission of Contributions. Unless You explicitly state otherwise, any Contribution intentionally submitted for inclusion in the Work by You to the Licensor

shall be under the terms and conditions of

this License, without any additional terms or conditions.

Notwithstanding the above, nothing herein shall supersede or modify the terms of any separate license agreement you may have executed with Licensor regarding such Contributions.

6. Trademarks. This License does not grant permission to use the trade names, trademarks, service marks, or product names of the Licensor, except as required for reasonable and customary use in describing the origin of the Work and reproducing the content of the NOTICE file.

7. Disclaimer of Warranty. Unless required by applicable law or agreed to in writing, Licensor provides the Work (and each Contributor provides its Contributions) on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied, including, without limitation, any warranties or conditions of TITLE, NON-INFRINGEMENT, MERCHANTABILITY, or

FITNESS FOR A

PARTICULAR PURPOSE. You are solely responsible for determining the appropriateness of using or redistributing the Work and assume any risks associated with Your exercise of permissions under this License.

8. Limitation of Liability. In no event and under no legal theory, whether in tort (including negligence), contract, or otherwise, unless required by applicable law (such as deliberate and grossly negligent acts) or agreed to in writing, shall any Contributor be liable to You for damages, including any direct, indirect, special, incidental, or consequential damages of any character arising as a result of this License or out of the use or inability to use the Work (including but not limited to damages for loss of goodwill, work stoppage, computer failure or malfunction, or any and all other commercial damages or losses), even if such Contributor has been advised of the possibility of such damages.

9. Accepting Warranty or Additional Liability. While redistributing the Work or Derivative Works thereof, You may choose to offer, and charge a fee for, acceptance of support, warranty, indemnity, or other liability obligations and/or rights consistent with this License. However, in accepting such obligations, You may act only on Your own behalf and on Your sole responsibility, not on behalf of any other Contributor, and only if You agree to indemnify, defend, and hold each Contributor harmless for any liability incurred by, or claims asserted against, such Contributor by reason of your accepting any such warranty or additional liability.

END OF TERMS AND CONDITIONS

APPENDIX: How to apply the Apache License to your work.

To apply the Apache License to your work, attach the following boilerplate notice, with the fields enclosed by brackets "[]" replaced with your own identifying information. (Don't include the brackets!) The text should be enclosed in the appropriate comment syntax for the file format. We also recommend that a file or class name and description of purpose be included on the same "printed page" as the copyright notice for easier identification within third-party archives.

Copyright [yyyy] [name of copyright owner]

Licensed under the Apache License, Version 2.0 (the "License");
you may not use this file except in compliance with the License.
You may obtain a copy of the License at

<http://www.apache.org/licenses/LICENSE-2.0>

Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License.

Google Auto, Guava JDK5, J2ObjC, JSR 250, SafeParcelable library:

Apache License
Version 2.0, January 2004
<http://www.apache.org/licenses/>

TERMS AND CONDITIONS FOR USE, REPRODUCTION, AND DISTRIBUTION

1. Definitions.

"License" shall mean the terms and conditions for use, reproduction, and distribution as defined by Sections 1 through 9 of this document.

"Licensor" shall mean the copyright owner or entity authorized by the copyright owner that is granting the License.

"Legal Entity" shall mean the union of the acting entity and all other entities that control, are controlled by, or are under common control with that entity. For the purposes of this definition, "control" means (i) the power, direct or indirect, to cause the direction or management of such entity, whether by contract or otherwise, or (ii) ownership of fifty percent (50%) or more of the outstanding shares, or (iii) beneficial ownership of such entity.

"You" (or "Your") shall mean an individual or Legal Entity exercising permissions granted by this License.

"Source" form shall mean the preferred form for making modifications, including but not limited to software source code, documentation source, and configuration files.

"Object" form shall mean any form resulting from mechanical transformation or translation of a Source form, including but not limited to compiled object code, generated documentation, and conversions to other media types.

"Work" shall mean the work of authorship, whether in Source or Object form, made available under the License, as indicated by a copyright notice that is included in or attached to the work (an example is provided in the Appendix below).

"Derivative Works" shall mean any work, whether in Source or Object form, that is based on (or derived from) the Work and for which the editorial revisions, annotations, elaborations, or other modifications represent, as a whole, an original work of authorship. For the purposes of this License, Derivative Works shall not include works that remain separable from, or merely link (or bind by name) to the interfaces of, the Work and Derivative Works thereof.

"Contribution" shall mean any work of authorship, including the original version of the Work and any modifications or additions

to that Work or Derivative Works thereof, that is intentionally submitted to Licensor for inclusion in the Work by the copyright owner or by an individual or Legal Entity authorized to submit on behalf of the copyright owner. For the purposes of this definition, "submitted" means any form of electronic, verbal, or written communication sent to the Licensor or its representatives, including but not limited to communication on electronic mailing lists, source code control systems, and issue tracking systems that are managed by, or on behalf of, the Licensor for the purpose of discussing and improving the Work, but excluding communication that is conspicuously marked or otherwise designated in writing by the copyright owner as "Not a Contribution."

"Contributor" shall mean Licensor and any individual or Legal Entity on behalf of whom a Contribution has been received by Licensor and subsequently incorporated within the Work.

2. Grant of Copyright License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable copyright license to reproduce, prepare Derivative Works of, publicly display, publicly perform, sublicense, and distribute the Work and such Derivative Works in Source or Object form.

3. Grant of Patent License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable (except as stated in this section) patent license to make, have made, use, offer to sell, sell, import, and otherwise transfer the Work, where such license applies only to those patent claims licensable by such Contributor that are necessarily infringed by their Contribution(s) alone or by combination of their Contribution(s) with the Work to which such Contribution(s) was submitted. If You institute patent litigation against any entity (including a cross-claim or counterclaim in a lawsuit) alleging that the Work or a Contribution incorporated within the Work constitutes direct or contributory patent infringement, then any patent licenses granted to You under this License for that Work shall terminate as of the date such litigation is filed.

4. Redistribution. You may reproduce and distribute copies of the Work or Derivative Works thereof in any medium, with or without modifications, and in Source or Object form, provided that You meet the following conditions:

(a) You must give any other recipients of the Work or Derivative Works a copy of this License; and

- (b) You must cause any modified files to carry prominent notices stating that You changed the files; and
- (c) You must retain, in the Source form of any Derivative Works that You distribute, all copyright, patent, trademark, and attribution notices from the Source form of the Work, excluding those notices that do not pertain to any part of the Derivative Works; and
- (d) If the Work includes a "NOTICE" text file as part of its distribution, then any Derivative Works that You distribute must include a readable copy of the attribution notices contained within such NOTICE file, excluding those notices that do not pertain to any part of the Derivative Works, in at least one of the following places: within a NOTICE text file distributed as part of the Derivative Works; within the Source form or documentation, if provided along with the Derivative Works; or, within a display generated by the Derivative Works, if and wherever such third-party notices normally appear. The contents of the NOTICE file are for informational purposes only and do not modify the License. You may add Your own attribution notices within Derivative Works that You distribute, alongside or as an addendum to the NOTICE text from the Work, provided that such additional attribution notices cannot be construed as modifying the License.

You may add Your own copyright statement to Your modifications and may provide additional or different license terms and conditions for use, reproduction, or distribution of Your modifications, or for any such Derivative Works as a whole, provided Your use, reproduction, and distribution of the Work otherwise complies with the conditions stated in this License.

5. Submission of Contributions. Unless You explicitly state otherwise, any Contribution intentionally submitted for inclusion in the Work by You to the Licensor shall be under the terms and conditions of this License, without any additional terms or conditions.

Notwithstanding the above, nothing herein shall supersede or modify the terms of any separate license agreement you may have executed with Licensor regarding such Contributions.

6. Trademarks. This License does not grant permission to use the trade names, trademarks, service marks, or product names of the Licensor, except as required for reasonable and customary use in describing the origin of the Work and reproducing the

content of the NOTICE file.

7. Disclaimer of Warranty. Unless required by applicable law or agreed to in writing, Licensor provides the Work (and each Contributor provides its Contributions) on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied, including, without limitation, any warranties or conditions of TITLE, NON-INFRINGEMENT, MERCHANTABILITY, or FITNESS FOR A PARTICULAR PURPOSE. You are solely responsible for determining the appropriateness of using or redistributing the Work and assume any risks associated with Your exercise of permissions under this License.

8. Limitation of Liability. In no event and under no legal theory, whether in tort (including negligence), contract, or otherwise, unless required by applicable law (such as deliberate and grossly negligent acts) or agreed to in writing, shall any Contributor be liable to You for damages, including any direct, indirect, special, incidental, or consequential damages of any character arising as a result of this License or out of the use or inability to use the Work (including but not limited to damages for loss of goodwill, work stoppage, computer failure or malfunction, or any and all other commercial damages or losses), even if such Contributor has been advised of the possibility of such damages.

9. Accepting Warranty or Additional Liability. While redistributing the Work or Derivative Works thereof, You may choose to offer, and charge a fee for, acceptance of support, warranty, indemnity, or other liability obligations and/or rights consistent with this License. However, in accepting such obligations, You may act only on Your own behalf and on Your sole responsibility, not on behalf of any other Contributor, and only if You agree to indemnify, defend, and hold each Contributor harmless for any liability

incurred by, or claims asserted against, such Contributor by reason of your accepting any such warranty or additional liability.

END OF TERMS AND CONDITIONS

APPENDIX: How to apply the Apache License to your work.

To apply the Apache License to your work, attach the following boilerplate notice, with the fields enclosed by brackets "[]" replaced with your own identifying information. (Don't include the brackets!) The text should be enclosed in the appropriate comment syntax for the file format. We also recommend that a file or class name and description of purpose be included on the same "printed page" as the copyright notice for easier

identification within third-party archives.

Copyright [yyyy] [name of copyright owner]

Licensed under the Apache License, Version 2.0 (the "License");

you may not use this file except in compliance with the License.

You may obtain a copy of the License at

<http://www.apache.org/licenses/LICENSE-2.0>

Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License.

Guava JDK7:

Apache License
Version 2.0, January 2004
<http://www.apache.org/licenses/>

TERMS AND CONDITIONS FOR USE, REPRODUCTION, AND DISTRIBUTION

1. Definitions.

"License" shall mean the terms and conditions for use, reproduction, and distribution as defined by Sections 1 through 9 of this document.

"Licensor" shall mean the copyright owner or entity authorized by the copyright owner that is granting the License.

"Legal Entity" shall mean the union of the acting entity and all other entities that control, are controlled by, or are under common control with that entity. For the purposes of this definition, "control" means (i) the power, direct or indirect, to cause the direction or management of such entity, whether by contract or otherwise, or (ii) ownership of fifty percent (50%) or more of the outstanding shares, or (iii) beneficial ownership of such entity.

"You" (or "Your") shall mean an individual or Legal Entity exercising permissions granted by this License.

"Source" form shall mean the preferred form for making modifications, including but not limited to software source code, documentation

source, and configuration files.

"Object" form shall mean any form resulting from mechanical transformation or translation of a Source form, including but not limited to compiled object code, generated documentation, and conversions to other media types.

"Work" shall mean the work of authorship, whether in Source or Object form, made available under the License, as indicated by a copyright notice that is included in or attached to the work (an example is provided in the Appendix below).

"Derivative Works" shall mean any work, whether in Source or Object form, that is based on (or derived from) the Work and for which the editorial revisions, annotations, elaborations, or other modifications represent, as a whole, an original work of authorship. For the purposes of this License, Derivative Works shall not include works that remain separable from, or merely link (or bind by name) to the interfaces of, the Work and Derivative Works thereof.

"Contribution" shall mean any work of authorship, including the original version of the Work and any modifications or additions to that Work or Derivative Works thereof, that is intentionally submitted to Licensor for inclusion in the Work by the copyright owner or by an individual or Legal Entity authorized to submit on behalf of the copyright owner. For the purposes of this definition, "submitted" means any form of electronic, verbal, or written communication sent to the Licensor or its representatives, including but not limited to communication on electronic mailing lists, source code control systems, and issue tracking systems that are managed by, or on behalf of, the Licensor for the purpose of discussing and improving the Work, but excluding communication that is conspicuously marked or otherwise designated in writing by the copyright owner as "Not a Contribution."

"Contributor" shall mean Licensor and any individual or Legal Entity on behalf of whom a Contribution has been received by Licensor and subsequently incorporated within the Work.

2. Grant of Copyright License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable copyright license to reproduce, prepare Derivative Works of, publicly display, publicly perform, sublicense, and distribute the Work and such Derivative Works in Source or Object form.

3. Grant of Patent License. Subject to the terms and conditions of

this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable (except as stated in this section) patent license to make, have made, use, offer to sell, sell, import, and otherwise transfer the Work, where such license applies only to those patent claims licensable by such Contributor that are necessarily infringed by their Contribution(s) alone or by combination of their Contribution(s) with the Work to which such Contribution(s) was submitted. If You institute patent litigation against any entity (including a

cross-claim or counterclaim in a lawsuit) alleging that the Work or a Contribution incorporated within the Work constitutes direct or contributory patent infringement, then any patent licenses granted to You under this License for that Work shall terminate as of the date such litigation is filed.

4. Redistribution. You may reproduce and distribute copies of the Work or Derivative Works thereof in any medium, with or without modifications, and in Source or Object form, provided that You meet the following conditions:

(a) You must give any other recipients of the Work or Derivative Works a copy of this License; and

(b) You must cause any modified files to carry prominent notices stating that You changed the files; and

(c) You must retain, in the Source form of any Derivative Works that You distribute, all copyright, patent, trademark, and attribution notices from the Source form of

the Work,

excluding those notices that do not pertain to any part of the Derivative Works; and

(d) If the Work includes a "NOTICE" text file as part of its distribution, then any Derivative Works that You distribute must include a readable copy of the attribution notices contained within such NOTICE file, excluding those notices that do not pertain to any part of the Derivative Works, in at least one of the following places: within a NOTICE text file distributed as part of the Derivative Works; within the Source form or documentation, if provided along with the Derivative Works; or, within a display generated by the Derivative Works, if and wherever such third-party notices normally appear. The contents of the NOTICE file are for informational purposes only and do not modify the License. You may add Your own attribution notices within Derivative

Works that You distribute, alongside

or as an addendum to the NOTICE text from the Work, provided that such additional attribution notices cannot be construed as modifying the License.

You may add Your own copyright statement to Your modifications and may provide additional or different license terms and conditions for use, reproduction, or distribution of Your modifications, or for any such Derivative Works as a whole, provided Your use, reproduction, and distribution of the Work otherwise complies with the conditions stated in this License.

5. Submission of Contributions. Unless You explicitly state otherwise, any Contribution intentionally submitted for inclusion in the Work by You to the Licensor shall be under the terms and conditions of this License, without any additional terms or conditions.

Notwithstanding the above, nothing herein shall supersede or modify the terms of any separate license agreement you may have executed with Licensor regarding such Contributions.

6. Trademarks. This License does not grant permission to use the trade names, trademarks, service marks, or product names of the Licensor, except as required for reasonable and customary use in describing the origin of the Work and reproducing the content of the NOTICE file.

7. Disclaimer of Warranty. Unless required by applicable law or agreed to in writing, Licensor provides the Work (and each Contributor provides its Contributions) on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied, including, without limitation, any warranties or conditions of TITLE, NON-INFRINGEMENT, MERCHANTABILITY, or FITNESS FOR A PARTICULAR PURPOSE. You are solely responsible for determining the appropriateness of using or redistributing the Work and assume any risks associated with Your exercise of permissions under this License.

8. Limitation of Liability. In no event and under no legal theory, whether in tort (including negligence), contract, or otherwise, unless required by applicable law (such as deliberate and grossly negligent acts) or agreed to in writing, shall any Contributor be liable to You for damages, including any direct, indirect, special, incidental, or consequential damages of any character arising as a result of this License or out of the use or inability to use the Work (including but not limited to damages for loss of goodwill, work stoppage, computer failure or malfunction, or any and all other commercial damages or losses), even if such Contributor has been advised of the possibility of such damages.

9. Accepting Warranty or Additional Liability. While redistributing the Work or Derivative Works thereof, You may choose to offer, and charge a fee for, acceptance of support, warranty, indemnity, or other liability obligations and/or rights consistent with this License. However, in accepting such obligations, You may act only on Your own behalf and on Your sole responsibility, not on behalf of any other Contributor, and only if You agree to indemnify, defend, and hold each Contributor harmless for any liability incurred by, or claims asserted against, such Contributor by reason of your accepting any such warranty or additional liability.

END OF TERMS AND CONDITIONS

APPENDIX: How to apply the Apache License to your work.

To apply the Apache License to your work, attach the following boilerplate notice, with the fields enclosed by brackets "[]" replaced with your own identifying information. (Don't include the brackets!) The text should be enclosed in the appropriate comment syntax for the file format. We also recommend that a file or class name and description of purpose be included on the same "printed page" as the copyright notice for easier identification within third-party archives.

Copyright [yyyy] [name of copyright owner]

Licensed under the Apache License, Version 2.0 (the "License");
you may not use this file except in compliance with the License.
You may obtain a copy of the License at

<http://www.apache.org/licenses/LICENSE-2.0>

Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License.

JSR 330:

JSR-330

Apache License
Version 2.0, January 2004

TERMS AND CONDITIONS FOR USE, REPRODUCTION, AND DISTRIBUTION

1. Definitions.

"License" shall mean the terms and conditions for use, reproduction, and distribution as defined by Sections 1 through 9 of this document.

"Licensor" shall mean the copyright owner or entity authorized by the copyright owner that is granting the License.

"Legal Entity" shall mean the union of the acting entity and all other entities that control, are controlled by, or are under common control with that entity. For the purposes of this definition, "control" means (i) the power, direct or indirect, to cause the direction or management of such entity, whether by contract or otherwise, or (ii) ownership of fifty percent (50%) or more of the outstanding shares, or (iii) beneficial ownership of such entity.

"You" (or "Your") shall mean an individual or Legal Entity exercising permissions granted by this License.

"Source" form shall mean the preferred form for making modifications, including but not limited to software source code, documentation source, and configuration files.

"Object" form shall mean any form resulting from mechanical transformation or translation of a Source form, including but not limited to compiled object code, generated documentation, and conversions to other media types.

"Work" shall mean the work of authorship, whether in Source or Object form, made available under the License, as indicated by a copyright notice that is included in or attached to the work (an example is provided in the Appendix below).

"Derivative Works" shall mean any work, whether in Source or Object form, that is based on (or derived from) the Work and for which the editorial revisions, annotations, elaborations, or other modifications represent, as a whole, an original work of authorship. For the purposes of this License, Derivative Works shall not include works that remain separable from, or merely link (or bind by name) to the interfaces of, the Work and Derivative Works thereof.

"Contribution" shall mean any work of authorship, including the original version of the Work and any modifications or additions to that Work or Derivative Works thereof, that is intentionally submitted to Licensor for inclusion in the Work by the copyright owner or by an individual or Legal Entity authorized to submit on behalf of the copyright owner. For the purposes of this definition, "submitted" means any form of electronic, verbal, or written communication sent to the Licensor or its representatives, including but not limited to communication on electronic mailing lists, source code control systems, and issue tracking systems that are managed by, or on behalf of, the Licensor for the purpose of discussing and improving the Work, but excluding communication that is conspicuously marked or otherwise designated in writing by the copyright owner as "Not a Contribution."

"Contributor" shall mean Licensor and any individual or Legal Entity on behalf of whom a Contribution has been received by Licensor and subsequently incorporated within the Work.

2. Grant of Copyright License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable copyright license to reproduce, prepare Derivative Works of, publicly display, publicly perform, sublicense, and distribute the Work and such Derivative Works in Source or Object form.
3. Grant of Patent License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable (except as stated in this section) patent license to make, have made, use, offer to sell, sell, import, and otherwise transfer the Work, where such license applies only to those patent claims licensable by such Contributor that are necessarily infringed by their Contribution(s) alone or by combination of their Contribution(s) with the Work to which such Contribution(s) was submitted. If You institute patent litigation against any entity (including a cross-claim or counterclaim in a lawsuit) alleging that the Work or a Contribution incorporated within the Work constitutes direct or contributory patent infringement, then any patent licenses granted to You under this License for that Work shall terminate as of the date such litigation is filed.
4. Redistribution. You may reproduce and distribute copies of the Work or Derivative Works thereof in any medium, with or without modifications, and in Source or Object form, provided that You meet the following conditions:

- (a) You must give any other recipients of the Work or Derivative Works a copy of this License; and
- (b) You must cause any modified files to carry prominent notices stating that You changed the files; and
- (c) You must retain, in the Source form of any Derivative Works that You distribute, all copyright, patent, trademark, and attribution notices from the Source form of the Work, excluding those notices that do not pertain to any part of the Derivative Works; and
- (d) If the Work includes a "NOTICE" text file as part of its distribution, then any Derivative Works that You distribute must include a readable copy of the attribution notices contained within such NOTICE file, excluding those notices that do not pertain to any part of the Derivative Works, in at least one of the following places: within a NOTICE text file distributed as part of the Derivative Works; within the Source form or

documentation, if provided along with the Derivative Works; or, within a display generated by the Derivative Works, if and wherever such third-party notices normally appear. The contents of the NOTICE file are for informational purposes only and do not modify the License. You may add Your own attribution notices within Derivative Works that You distribute, alongside or as an addendum to the NOTICE text from the Work, provided that such additional attribution notices cannot be construed as modifying the License.

You may add Your own copyright statement to Your modifications and may provide additional or different license terms and conditions for use, reproduction, or distribution of Your modifications, or for any such Derivative Works as a whole, provided Your use, reproduction, and distribution of the Work otherwise complies with the conditions stated in this License.

5. Submission of Contributions. Unless You explicitly state otherwise, any Contribution intentionally submitted for inclusion in the Work by You to the Licensor shall be under the terms and conditions of this License, without any additional terms or conditions.

Notwithstanding the above, nothing herein shall supersede or modify the terms of any separate license agreement you may have executed with Licensor regarding such Contributions.

6. Trademarks. This License does not grant permission to use the trade names, trademarks, service marks, or product names of the Licensor,

except as required for reasonable and customary use in describing the origin of the Work and reproducing the content of the NOTICE file.

7. Disclaimer of Warranty. Unless required by applicable law or agreed to in writing, Licensor provides the Work (and each Contributor provides its Contributions) on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied, including, without limitation, any warranties or conditions of TITLE, NON-INFRINGEMENT, MERCHANTABILITY, or FITNESS FOR A PARTICULAR PURPOSE. You are solely responsible for determining the appropriateness of using or redistributing the Work and assume any risks associated with Your exercise of permissions under this License.

8. Limitation of Liability. In no event and under no legal theory, whether in tort (including negligence), contract, or otherwise, unless required by applicable law (such as deliberate and grossly negligent acts) or agreed to in writing, shall any Contributor be liable to You for damages, including any direct, indirect, special, incidental, or consequential damages of any character arising as a result of this License or out of the use or inability to use the Work (including but not limited to damages for loss of goodwill, work stoppage, computer failure or malfunction, or any and all other commercial damages or losses), even if such Contributor has been advised of the possibility of such damages.

9. Accepting Warranty or Additional Liability. While redistributing the Work or Derivative Works thereof, You may choose to offer, and charge a fee for, acceptance of support, warranty, indemnity, or other liability obligations and/or rights consistent with this License. However, in accepting such obligations, You may act only on Your own behalf and on Your sole responsibility, not on behalf of any other Contributor, and only if You agree to indemnify, defend, and hold each Contributor harmless for any liability incurred by, or claims asserted against, such Contributor by reason of your accepting any such warranty or additional liability.

END OF TERMS AND CONDITIONS

APPENDIX: How to apply the Apache License to your work.

To apply the Apache License to your work, attach the following boilerplate notice, with the fields enclosed by brackets "[]" replaced with your own identifying information. (Don't include the brackets!) The text should be enclosed in the appropriate comment syntax for the file format. We also recommend that a

file or class name and description of purpose be included on the same "printed page" as the copyright notice for easier identification within third-party archives.

Copyright [yyyy] [name of copyright owner]

Licensed under the Apache License, Version 2.0 (the "License");
you may not use this file except in compliance with the License.
You may obtain a copy of the License at

<http://www.apache.org/licenses/LICENSE-2.0>

Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License.

JsInterop Annotations:

Apache License

Version 2.0, January 2004

<http://www.apache.org/licenses/>

TERMS AND CONDITIONS FOR USE, REPRODUCTION, AND DISTRIBUTION

1. Definitions.

"License" shall mean the terms and conditions for use, reproduction, and distribution as defined by Sections 1 through 9 of this document.

"Licensor" shall mean the copyright owner or entity authorized by the copyright owner that is granting the License.

"Legal Entity" shall mean the union of the acting entity and all other entities that control, are controlled by, or are under common control with that entity. For the purposes of this definition, "control" means (i) the power, direct or indirect, to cause the direction or management of such entity, whether by contract or otherwise, or (ii)

ownership of fifty percent (50%) or more of the outstanding shares, or (iii) beneficial ownership of such entity.

"You" (or "Your") shall mean an individual or Legal Entity exercising permissions granted by this License.

"Source" form shall mean the preferred form for making modifications,

including but not limited to software source code, documentation source, and configuration files.

"Object" form shall mean any form resulting from mechanical transformation or translation of a Source form, including but not limited to compiled object code, generated documentation, and conversions to other media types.

"Work" shall mean the work of authorship, whether in Source or Object form, made available under the License, as indicated by a copyright notice that is included in or attached to the work (an example is provided in the Appendix below).

"Derivative Works" shall mean any work, whether in Source or Object form, that is based on (or derived from) the Work and for which the editorial revisions, annotations, elaborations, or other modifications represent, as a whole, an original work of authorship. For the purposes of this License, Derivative Works shall not include works that remain separable from, or merely link (or bind by name) to the interfaces of, the Work and Derivative Works thereof.

"Contribution" shall mean any work of authorship, including the original version of the Work and any modifications or additions to that Work or Derivative Works thereof, that is intentionally submitted to Licensor for inclusion in the Work by the copyright owner or by an individual or Legal Entity authorized to submit on behalf of the copyright owner. For the purposes of this definition, "submitted" means any form of electronic, verbal, or written communication sent to the Licensor or its representatives, including but not limited to communication on electronic mailing lists, source code control systems, and issue tracking systems that are managed by, or on behalf of, the Licensor for the purpose of discussing and improving the Work, but excluding communication that is conspicuously marked or otherwise designated in writing by the copyright owner as "Not a Contribution."

"Contributor" shall mean Licensor and any individual or Legal Entity on behalf of whom a Contribution has been received by Licensor and subsequently incorporated within the Work.

2. Grant of Copyright License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable copyright license to reproduce, prepare Derivative Works of, publicly display, publicly perform, sublicense, and distribute the Work and such Derivative Works in Source

or Object form.

3. Grant of Patent License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable (except as stated in this section) patent license to make, have made, use, offer to sell, sell, import, and otherwise transfer the Work, where such license applies only to those patent claims licensable by such Contributor that are necessarily infringed by their Contribution(s) alone or by combination of their Contribution(s) with the Work to which such Contribution(s) was submitted. If You institute patent litigation against any entity (including a cross-claim or counterclaim in a lawsuit) alleging that the Work or a Contribution incorporated within the Work constitutes direct or contributory patent infringement, then any patent licenses granted to You under this License for that Work shall terminate as of the date such litigation is filed.

4. Redistribution. You may reproduce and distribute copies of the Work or Derivative Works thereof in any medium, with or without modifications, and in Source or Object form, provided that You meet the following conditions:

- (a) You must give any other recipients of the Work or Derivative Works a copy of this License; and
- (b) You must cause any modified files to carry prominent notices stating that You changed the files; and
- (c) You must retain, in the Source form of any Derivative Works that You distribute, all copyright, patent, trademark, and attribution notices from the Source form of the Work, excluding those notices that do not pertain to any part of the Derivative Works; and
- (d) If the Work includes a "NOTICE" text file as part of its distribution, then any Derivative Works that You distribute must

include a readable copy of the attribution notices contained within such NOTICE file, excluding those notices that do not pertain to any part of the Derivative Works, in at least one of the following places: within a NOTICE text file distributed as part of the Derivative Works; within the Source form or documentation, if provided along with the Derivative Works; or, within a display generated by the Derivative Works, if and wherever such third-party notices normally appear. The contents of the NOTICE file are for informational purposes only and do not modify the License. You may add Your own attribution

notices within Derivative Works that You distribute, alongside or as an addendum to the NOTICE text from the Work, provided that such additional attribution notices cannot be construed as modifying the License.

You may add Your own copyright statement to Your modifications and may provide additional or different license terms and conditions for use, reproduction, or distribution of Your modifications, or for any such Derivative Works as a whole, provided Your use, reproduction, and distribution of the Work otherwise complies with the conditions stated in this License.

5. Submission of Contributions. Unless You explicitly state otherwise, any Contribution intentionally submitted for inclusion in the Work by You to the Licensor shall be under the terms and conditions of this License, without any additional terms or conditions.

Notwithstanding the above, nothing herein shall supersede or modify the terms of any separate license agreement you may have executed with Licensor regarding such Contributions.

6. Trademarks. This License does not grant permission to use the trade names, trademarks, service marks, or product names of the Licensor, except as required

for reasonable and customary use in describing the origin of the Work and reproducing the content of the NOTICE file.

7. Disclaimer of Warranty. Unless required by applicable law or agreed to in writing, Licensor provides the Work (and each Contributor provides its Contributions) on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied, including, without limitation, any warranties or conditions of TITLE, NON-INFRINGEMENT, MERCHANTABILITY, or FITNESS FOR A PARTICULAR PURPOSE. You are solely responsible for determining the appropriateness of using or redistributing the Work and assume any risks associated with Your exercise of permissions under this License.

8. Limitation of Liability. In no event and under no legal theory, whether in tort (including negligence), contract, or otherwise, unless required by applicable law (such as deliberate and grossly negligent acts)

or agreed to in writing, shall any Contributor be liable to You for damages, including any direct, indirect, special, incidental, or consequential damages of any character arising as a result of this License or out of the use or inability to use the Work (including but not limited to damages for loss of goodwill, work stoppage, computer failure or malfunction, or any and all other commercial damages or losses), even if such Contributor

has been advised of the possibility of such damages.

9. Accepting Warranty or Additional Liability. While redistributing the Work or Derivative Works thereof, You may choose to offer, and charge a fee for, acceptance of support, warranty, indemnity, or other liability obligations and/or rights consistent with this License. However, in accepting such obligations, You may act only on Your own behalf and on Your sole responsibility, not on behalf of any other Contributor, and only if You agree to indemnify, defend, and hold each Contributor harmless for any liability incurred by, or claims asserted against, such Contributor by reason of your accepting any such warranty or additional liability.

END OF TERMS AND CONDITIONS

APPENDIX: How to apply the Apache License to your work.

To apply the Apache License to your work, attach the following boilerplate notice, with the fields enclosed by brackets "[]" replaced with your own identifying information. (Don't include the brackets!) The text should be enclosed in the appropriate comment syntax for the file format. We also recommend that a file or class name and description of purpose be included on the same "printed page" as the copyright notice for easier identification within third-party archives.

Copyright 2017 Google Inc.

Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License.

You may obtain a copy of the License at

<http://www.apache.org/licenses/LICENSE-2.0>

Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License.

JSR 305:

Copyright (c) 2007-2009, JSR305 expert group
All rights reserved.

<http://www.opensource.org/licenses/bsd-license.php>

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- * Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
- * Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
- * Neither the name of the JSR305 expert group nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

1.21 kotlin 1.6.10

1.22 okio 3.0.0

1.22.1 Available under license :

No license file was found, but licenses were detected in source scan.

/*

* Copyright (C) 2015 Square, Inc.

*

* Licensed under the Apache License, Version 2.0 (the "License");

* you may not use this file except in compliance with the License.

* You may obtain a copy of the License at

*

* <http://www.apache.org/licenses/LICENSE-2.0>

*

* Unless required by applicable law or agreed to in writing, software

* distributed under the License is distributed on an "AS IS" BASIS,

- * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
- * See the License for the specific language governing permissions and
- * limitations under the License.
- */

Found in path(s):

- * /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/jvmMain/okio/ForwardingTimeout.kt
- * /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/jvmMain/okio/SegmentedByteString.kt
- * /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/commonMain/okio/SegmentedByteString.kt
- *

- /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/jvmTest/okio/SegmentSharingTest.kt
- * /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/nonJvmMain/okio/SegmentedByteString.kt

No license file was found, but licenses were detected in source scan.

/*

- * Licensed to the Apache Software Foundation (ASF) under one or more
- * contributor license agreements. See the NOTICE file distributed with
- * this work for additional information regarding copyright ownership.
- * The ASF licenses this file to You under the Apache License, Version 2.0
- * (the "License"); you may not use this file except in compliance with
- * the License. You may obtain a copy of the License at
- *
- * <http://www.apache.org/licenses/LICENSE-2.0>
- *
- * Unless required by applicable law or agreed to in writing, software
- * distributed under the License is distributed on an "AS IS" BASIS,
- * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
- * See the License for the specific language governing permissions and
- * limitations under the License.
- */

Found in path(s):

- * /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/commonMain/okio/-Base64.kt
- No license file was found, but licenses were detected in source scan.

/*

- * Copyright (C) 2021 Square, Inc.
- *
- * Licensed under the Apache License, Version 2.0 (the "License");
- * you may not use this file except in compliance with the License.
- * You may obtain a copy of the License at
- *
- * <http://www.apache.org/licenses/LICENSE-2.0>
- *
- * Unless required by applicable law or agreed to in writing, software
- * distributed under the License is distributed on an "AS IS" BASIS,

- * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
- * See the License for the specific language governing permissions and
- * limitations under the License.
- */

Found in path(s):

- * /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/jvmMain/okio/JvmFileHandle.kt
- * /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/nonJvmTest/okio/utilNonJvm.kt
- * /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/mingwX64Main/okio/WindowsFileHandle.kt
- *
- /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/jvmTest/okio/FixedLengthSourceTest.kt
- * /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/jvmTest/okio/TimeoutTest.kt
- * /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/jvmMain/okio/internal/FixedLengthSource.kt
- * /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/jvmTest/okio/ZipFileSystemTest.kt
- * /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/unixMain/okio/UnixFileHandle.kt
- * /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/nativeMain/okio/FileSystem.kt
- * /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/jvmTest/okio/ZipBuilder.kt
- * /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/jvmTest/okio/internal/ResourceFileSystemTest.kt
- * /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/jvmMain/okio/internal/ResourceFileSystem.kt
- * /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/commonMain/okio/FileHandle.kt
- *
- /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/jvmMain/okio/FileSystem.kt
- * /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/jvmTest/okio/utilJvm.kt
- * /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/jvmTest/okio/FileHandleTestingFileSystem.kt
- * /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/commonMain/okio/internal/FileSystem.kt

No license file was found, but licenses were detected in source scan.

/*

- * Copyright (C) 2018 Square, Inc.
- *
- * Licensed under the Apache License, Version 2.0 (the "License");
- * you may not use this file except in compliance with the License.
- * You may obtain a copy of the License at
- *
- * <http://www.apache.org/licenses/LICENSE-2.0>
- *
- * Unless required by applicable law or agreed to in writing, software
- * distributed under the License is distributed on an "AS IS" BASIS,
- * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
- * See the License for the specific language governing permissions and
- * limitations under the License.
- */

Found in path(s):

- * /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/jvmTest/okio/ForwardingTimeoutKotlinTest.kt
- * /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/jvmTest/okio/GzipKotlinTest.kt
- * /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/jvmTest/okio/ByteStringKotlinTest.kt
- *
- /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/jvmMain/okio/-DeprecatedUtf8.kt
- * /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/jvmMain/okio/-DeprecatedUpgrade.kt
- * /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/jvmTest/okio/BufferCursorTest.java
- * /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/jvmTest/okio/PipeKotlinTest.kt
- * /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/jvmTest/okio/NioTest.java
- * /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/jvmTest/okio/BufferKotlinTest.kt
- * /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/jvmTest/okio/ThrottlerTest.kt
- * /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/jvmTest/okio/ThrottlerTakeTest.kt
- * /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/jvmTest/okio/DeflateKotlinTest.kt
- * /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/jvmMain/okio/Throttler.kt
- *
- /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/jvmTest/okio/BufferCursorKotlinTest.kt
- * /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/commonMain/okio/PeekSource.kt
- * /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/commonTest/okio/CommonOptionsTest.kt
- * /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/jvmTest/okio/ForwardingTimeoutTest.java
- * /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/jvmTest/okio/OkioKotlinTest.kt
- * /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/jvmMain/okio/-DeprecatedOkio.kt
- * /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/jvmTest/okio/Stopwatch.kt
- * /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/commonTest/okio/Utf8KotlinTest.kt

No license file was found, but licenses were detected in source scan.

/*

* Copyright (C) 2014 Square, Inc.

*

* Licensed under the Apache License, Version 2.0 (the "License");

* you may not use this file except in compliance with the License.

* You may obtain a copy of the License at

*

* <http://www.apache.org/licenses/LICENSE-2.0>

*

* Unless required by applicable law or agreed to in writing, software

* distributed under the License is distributed on an "AS IS" BASIS,

* WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.

* See the License for the specific language governing permissions and

* limitations under the License.

*/

Found in path(s):

- * /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/nonJvmMain/okio/RealBufferedSource.kt

```

* /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/jvmMain/okio/GzipSink.kt
* /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/jvmMain/okio/RealBufferedSource.kt
*
/opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/jvmTest/okio/BufferedSinkTest.java
* /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/jvmTest/okio/TestUtil.kt
* /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/jvmMain/okio/AsyncTimeout.kt
* /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/jvmMain/okio/BufferedSink.kt
* /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/jvmMain/okio/GzipSource.kt
* /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/jvmTest/okio/OkioTest.java
* /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/jvmMain/okio/BufferedSource.kt
* /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/jvmMain/okio/Timeout.kt
* /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/jvmTest/okio/SocketTimeoutTest.java
* /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/jvmMain/okio/Buffer.kt
* /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/jvmTest/okio/BufferedSinkJavaTest.java
*
/opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/commonTest/okio/MockSink.kt
* /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/jvmTest/okio/GzipSinkTest.java
* /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/jvmMain/okio/ForwardingSource.kt
* /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/jvmTest/okio/DeflaterSinkTest.java
* /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/jvmMain/okio/DeflaterSink.kt
* /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/jvmTest/okio/AsyncTimeoutTest.java
* /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/jvmTest/okio/ReadUtf8LineTest.java
* /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/jvmMain/okio/ForwardingSink.kt
* /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/jvmMain/okio/SegmentPool.kt
*
/opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/jvmTest/okio/GzipSourceTest.java
* /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/jvmMain/okio/InflaterSource.kt
* /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/jvmMain/okio/JvmOkio.kt
* /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/nonJvmMain/okio/SegmentPool.kt
* /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/jvmTest/okio/BufferedSourceTest.java
* /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/commonTest/okio/CommonBufferTest.kt
* /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-
jar/jvmTest/okio/BufferedSourceJavaTest.java
* /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/jvmMain/okio/Sink.kt
* /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/commonMain/okio/SegmentPool.kt
* /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/jvmTest/okio/Utf8Test.java
*
/opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/jvmTest/okio/InflaterSourceTest.java
* /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/jvmTest/okio/BufferTest.java
* /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/jvmMain/okio/RealBufferedSink.kt
* /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/commonMain/okio/Segment.kt
No license file was found, but licenses were detected in source scan.

```

```
/*
```

```
* Copyright 2014 Square Inc.
```

```
*
```

```
* Licensed under the Apache License, Version 2.0 (the "License");
```

```
* you may not use this file except in compliance with the License.
```

* You may obtain a copy of the License at
*
* <http://www.apache.org/licenses/LICENSE-2.0>
*
* Unless required by applicable law or agreed to in writing, software
* distributed under the License is distributed on an "AS IS" BASIS,
* WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
* See the License for the specific language governing permissions and
* limitations under the License.
*/

Found in path(s):

* /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/jvmMain/okio/ByteString.kt
* /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/jvmTest/okio/ByteStringJavaTest.java
* /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/commonTest/okio/HashingTest.kt

No license file was found, but licenses were detected in source scan.

/*
* Copyright (C) 2018 Square, Inc.
*
* Licensed under the Apache License, Version 2.0 (the "License");
* you may not use this file except in compliance with the License.
* You may obtain a copy of the License at
*
* <http://www.apache.org/licenses/LICENSE-2.0>
*
* Unless required by applicable law or agreed to in writing, software
* distributed under the License is distributed on an "AS IS" BASIS,
* WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
* See the License for the specific language governing permissions and
* limitations under the License.
*/

Found in path(s):

* /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/commonMain/okio/internal/-
ByteString.kt
* /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/commonMain/okio/-CommonPlatform.kt
* /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/commonTest/okio/ByteStringFactory.kt
*
/opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/commonMain/okio/internal/-Utf8.kt
* /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/jvmMain/okio/-JvmPlatform.kt
* /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/commonTest/okio/ByteStringTest.kt
* /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/nonJvmMain/okio/ByteString.kt
* /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/commonMain/okio/ByteString.kt
* /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/commonMain/okio/-Util.kt
* /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/nonJvmMain/okio/-NonJvmPlatform.kt

No license file was found, but licenses were detected in source scan.

```
/*
 * Copyright (C) 2019 Square, Inc.
 *
 * Licensed under the Apache License, Version 2.0 (the "License");
 * you may not use this file except in compliance with the License.
 * You may obtain a copy of the License at
 *
 * http://www.apache.org/licenses/LICENSE-2.0
 *
 * Unless required by applicable law or agreed to in writing, software
 * distributed under the License is distributed on an "AS IS" BASIS,
 * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
 * See the License for the specific language governing permissions and
 * limitations under the License.
 */
```

Found in path(s):

```
 * /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/commonMain/okio/internal/-
RealBufferedSource.kt
 * /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/commonMain/okio/internal/-
RealBufferedSink.kt
 * /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/commonMain/okio/internal/-
SegmentedByteString.kt
```

No license file was found, but licenses were detected in source scan.

```
/*
 * Licensed to the Apache Software Foundation (ASF) under one or more
 * contributor license agreements. See the NOTICE file distributed with
 * this work for additional information regarding copyright ownership.
 * The ASF licenses this file to You under the Apache License, Version 2.0
 * (the "License"); you may not use this file except in compliance with
 * the License. You may obtain a copy of the License at
 *
 * http://www.apache.org/licenses/LICENSE-2.0
 *
 * Unless required by applicable law or agreed to in writing, software
 * distributed under the License is distributed on an "AS IS" BASIS,
 * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
 * See the License for the specific language governing permissions and
 * limitations under the License.
 */
```

Found in path(s):

```
 * /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/jvmMain/okio/internal/zip.kt
 * /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/jvmMain/okio/internal/ZipEntry.kt
 *
 * /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/jvmMain/okio/ZipFileSystem.kt
```

No license file was found, but licenses were detected in source scan.

```
/*
 * Copyright (C) 2016 Square, Inc.
 *
 * Licensed under the Apache License, Version 2.0 (the "License");
 * you may not use this file except in compliance with the License.
 * You may obtain a copy of the License at
 *
 * http://www.apache.org/licenses/LICENSE-2.0
 *
 * Unless required by applicable law or agreed to in writing, software
 * distributed under the License is distributed on an "AS IS" BASIS,
 * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
 * See the License for the specific language governing permissions and
 * limitations under the License.
 */
```

Found in path(s):

```
*/opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/jvmTest/okio/WaitUntilNotifiedTest.java
*/opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/jvmMain/okio/HashingSink.kt
*/opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/commonTest/okio/HashingSourceTest.kt
*
/opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/jvmTest/okio/LargeStreamsTest.java
*/opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/jvmMain/okio/Pipe.kt
*/opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/jvmMain/okio/HashingSource.kt
*/opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/commonTest/okio/HashingSinkTest.kt
*/opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/commonMain/okio/Options.kt
*/opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/jvmTest/okio/PipeTest.java
```

No license file was found, but licenses were detected in source scan.

```
/*
 * Copyright (C) 2020 Square, Inc.
 *
 * Licensed under the Apache License, Version 2.0 (the "License");
 * you may not use this file except in compliance with the License.
 * You may obtain a copy of the License at
 *
 * http://www.apache.org/licenses/LICENSE-2.0
 *
 * Unless required by applicable law or agreed to in writing, software
 * distributed under the License is distributed on an "AS IS" BASIS,
 * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
 * See the License for the specific language governing permissions and
 * limitations under the License.
 */
```

Found in path(s):

* /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/nativeMain/okio/-SizetVariant.kt

No license file was found, but licenses were detected in source scan.

/*

* Copyright (C) 2019 Square, Inc.

*

* Licensed under the Apache License, Version 2.0 (the "License");

* you may not use this file except in compliance with the License.

* You may obtain a copy of the License at

*

* <http://www.apache.org/licenses/LICENSE-2.0>

*

* Unless required by applicable law or agreed to in writing, software

* distributed under the License is distributed on an "AS IS" BASIS,

* WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.

* See the License for the specific language governing permissions and

* limitations under the License.

*/

Found in path(s):

* /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/jvmTest/okio/BufferFactory.kt

* /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/commonMain/okio/Buffer.kt

* /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/commonMain/okio/Okio.kt

* /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/nonJvmMain/okio/Sink.kt

*

/opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/commonMain/okio/Source.kt

* /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/commonMain/okio/Sink.kt

* /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/commonMain/okio/RealBufferedSink.kt

* /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-

jar/commonMain/okio/RealBufferedSource.kt

* /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/commonMain/okio/internal/-Buffer.kt

* /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-

jar/commonTest/okio/CommonRealBufferedSinkTest.kt

* /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-

jar/commonTest/okio/AbstractBufferedSourceTest.kt

* /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/nonJvmMain/okio/BufferedSink.kt

* /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/commonTest/okio/BufferCommonTest.kt

*

/opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/nonJvmMain/okio/BufferedSource.kt

* /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/commonMain/okio/BufferedSink.kt

* /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-

jar/commonTest/okio/AbstractBufferedSinkTest.kt

* /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/nonJvmMain/okio/RealBufferedSink.kt

* /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-

jar/commonTest/okio/CommonRealBufferedSourceTest.kt

* /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-

jar/commonTest/okio/CommonOkioKotlinTest.kt

* /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/commonMain/okio/Timeout.kt

* /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/commonTest/okio/BufferedSinkFactory.kt
* /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/nonJvmMain/okio/Timeout.kt
* /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/commonTest/okio/util.kt
*
/opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/commonMain/okio/BufferedSource.kt
* /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/commonTest/okio/BufferedSourceFactory.kt
* /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/nonJvmMain/okio/Buffer.kt
No license file was found, but licenses were detected in source scan.

/*

* Copyright (C) 2020 Square, Inc.

*

* Licensed under the Apache License, Version 2.0 (the "License");

* you may not use this file except in compliance with the License.

* You may obtain a copy of the License at

*

* <http://www.apache.org/licenses/LICENSE-2.0>

*

* Unless required by applicable law or agreed to in writing, software

* distributed under the License is distributed on an "AS IS" BASIS,

* WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.

* See the License for the specific language governing permissions and

* limitations under the License.

*/

Found in path(s):

* /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/nonJvmMain/okio/internal/Sha512.kt

* /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/jvmTest/okio/internal/Md5.kt

* /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/jvmTest/okio/MessageDigestConsistencyTest.kt

*

/opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/nonJvmMain/okio/internal/Sha256.kt

* /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/nonJvmMain/okio/internal/Md5.kt

* /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/nonJvmMain/okio/internal/Sha1.kt

* /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/jvmTest/okio/internal/Sha512.kt

* /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/jvmTest/okio/internal/Sha256.kt

* /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/jvmTest/okio/internal/Sha1.kt

No license file was found, but licenses were detected in source scan.

/*

* Copyright (C) 2017 Square, Inc.

*

* Licensed under the Apache License, Version 2.0 (the "License");

* you may not use this file except in compliance with the License.

* You may obtain a copy of the License at

*

* <http://www.apache.org/licenses/LICENSE-2.0>
*
* Unless required by applicable law or agreed to in writing, software
* distributed under the License is distributed on an "AS IS" BASIS,
* WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
* See the License for the specific language governing permissions and
* limitations under the License.
*/

Found in path(s):

* /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/commonMain/okio/Utf8.kt
No license file was found, but licenses were detected in source scan.

/*

* Copyright (C) 2020 Square, Inc. and others.
*
* Licensed under the Apache License, Version 2.0 (the "License");
* you may not use this file except in compliance with the License.
* You may obtain a copy of the License at
*
* <http://www.apache.org/licenses/LICENSE-2.0>

*
* Unless required by applicable law or agreed to in writing, software
* distributed under the License is distributed on an "AS IS" BASIS,
* WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
* See the License for the specific language governing permissions and
* limitations under the License.
*/

Found in path(s):

* /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/nonJvmMain/okio/internal/HashFunction.kt
* /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/jvmTest/okio/internal/HashFunction.kt
* /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/jvmMain/okio/CipherSink.kt
*
* /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/jvmTest/okio/CipherAlgorithm.kt
* /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/jvmTest/okio/CipherSinkTest.kt
* /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/jvmTest/okio/CipherSourceTest.kt
* /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/jvmMain/okio/CipherSource.kt
* /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/jvmTest/okio/CipherFactory.kt
No license file was found, but licenses were detected in source scan.

/*

* Copyright (C) 2020 Square, Inc.
*
* Licensed under the Apache License, Version 2.0 (the "License");
* you may not use this file except in compliance with the License.
* You may obtain a copy of the License at

*
 * <http://www.apache.org/licenses/LICENSE-2.0>
 *
 * Unless required by applicable law or agreed to in writing, software
 * distributed under the License is distributed on an "AS IS" BASIS,
 * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
 * See the License for the specific language governing permissions and
 * limitations under the License.
 */

Found in path(s):

* /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/commonTest/okio/FakeFileSystemTest.kt
 * /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/commonMain/okio/HashingSource.kt
 * /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/mingwX64Main/okio/-Windows.kt
 *
 /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/commonTest/okio/PathTest.kt
 * /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/commonMain/okio/HashingSink.kt
 * /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/commonMain/okio/FileMetadata.kt
 * /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-
 jar/commonTest/okio/ForwardingFileSystemTest.kt
 * /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/commonMain/okio/Path.kt
 * /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/sizet64Main/okio/-Sizet64.kt
 * /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/jsMain/okio/-JsPlatform.kt
 * /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-
 jar/commonMain/okio/ExperimentalFileSystem.kt
 * /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/sizet32Main/okio/-Sizet32.kt
 * /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/nativeMain/okio/-Cinterop.kt
 *
 /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/commonMain/okio/internal/-Path.kt
 * /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/jsMain/okio/FileSystem.kt
 * /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/nativeMain/okio/-PosixVariant.kt
 * /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-
 jar/commonMain/okio/ForwardingFileSystem.kt
 * /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-
 jar/nativeTest/okio/NativeSystemFileSystemTest.kt
 * /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/nonJvmMain/okio/internal/Hmac.kt
 * /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/nonJvmMain/okio/Path.kt
 * /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/jvmTest/okio/FileSystemJavaTest.java
 * /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/unixMain/okio/-UnixPosixVariant.kt
 * /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/nativeMain/okio/FileSource.kt
 *
 /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/nonJvmMain/okio/HashingSink.kt
 * /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/linuxX64Main/okio/-
 LinuxX64PosixVariant.kt
 * /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/commonTest/okio/UnsafeCursorTest.kt
 * /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/appleMain/okio/-ApplePosixVariant.kt
 * /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/nativeMain/okio/PosixFileSystem.kt
 * /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/nonJvmMain/okio/HashingSource.kt

```

* /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/jvmTest/okio/internal/Hmac.kt
* /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/nativeMain/okio/FileSink.kt
* /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/jvmTest/okio/JvmTest.kt
* /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/appleMain/okio/ByteString.kt
*
/opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/jvmMain/okio/Path.kt
* /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/mingwX64Main/okio/-
WindowsPosixVariant.kt
* /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/jvmTest/okio/internal/HmacTest.kt
* /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/appleTest/okio/AppleByteStringTest.kt
* /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/jvmMain/okio/NioSystemFileSystem.kt
* /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-
jar/jvmTest/okio/ZipFileSystemJavaTest.java
* /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/jvmMain/okio/JvmSystemFileSystem.kt
* /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-jar/commonMain/okio/FileSystem.kt
* /opt/cola/permits/1310287373_1650320542.41/0/okio-3-0-0-sources-
jar/jvmTest/okio/JvmSystemFileSystemTest.kt

```

1.23 protobuf-java 3.20.1

1.23.1 Available under license :

No license file was found, but licenses were detected in source scan.

```

// Copyright 2008 Google Inc. All rights reserved.
// Redistribution and use in source and binary forms, with or without
// modification, are permitted provided that the following conditions are
// * Redistributions of source code must retain the above copyright
// notice, this list of conditions and the following disclaimer.
// * Redistributions in binary form must reproduce the above
// copyright notice, this list of conditions and the following disclaimer
// in the documentation and/or other materials provided with the
// * Neither the name of Google Inc. nor the names of its
// this software without specific prior written permission.

```

Found in path(s):

```

* /opt/cola/permits/1483182498_1669147240.6581564/0/protobuf-java-3-20-1-3-jar/google/protobuf/empty.proto
* /opt/cola/permits/1483182498_1669147240.6581564/0/protobuf-java-3-20-1-3-
jar/google/protobuf/source_context.proto
* /opt/cola/permits/1483182498_1669147240.6581564/0/protobuf-java-3-20-1-3-
jar/google/protobuf/wrappers.proto
*
/opt/cola/permits/1483182498_1669147240.6581564/0/protobuf-java-3-20-1-3-jar/google/protobuf/any.proto
* /opt/cola/permits/1483182498_1669147240.6581564/0/protobuf-java-3-20-1-3-
jar/google/protobuf/descriptor.proto
* /opt/cola/permits/1483182498_1669147240.6581564/0/protobuf-java-3-20-1-3-jar/google/protobuf/struct.proto
* /opt/cola/permits/1483182498_1669147240.6581564/0/protobuf-java-3-20-1-3-
jar/google/protobuf/timestamp.proto

```

```
* /opt/cola/permits/1483182498_1669147240.6581564/0/protobuf-java-3-20-1-3-jar/google/protobuf/api.proto
* /opt/cola/permits/1483182498_1669147240.6581564/0/protobuf-java-3-20-1-3-
jar/google/protobuf/compiler/plugin.proto
* /opt/cola/permits/1483182498_1669147240.6581564/0/protobuf-java-3-20-1-3-jar/google/protobuf/type.proto
* /opt/cola/permits/1483182498_1669147240.6581564/0/protobuf-java-3-20-1-3-jar/google/protobuf/duration.proto
* /opt/cola/permits/1483182498_1669147240.6581564/0/protobuf-java-3-20-1-3-
jar/google/protobuf/field_mask.proto
No license file was found, but licenses were detected in source scan.
```

```
Manifest-Version: 1.0
Automatic-Module-Name: com.google.protobuf
Bnd-LastModified: 1650575142706
Build-Jdk: 1.8.0_181-google-v7
Built-By: haberman
Bundle-Description: Core Protocol Buffers library. Protocol Buffers are
a way of encoding structured data in an efficient yet extensible for
mat.
Bundle-DocURL: https://developers.google.com/protocol-buffers/
Bundle-License: https://opensource.org/licenses/BSD-3-Clause
Bundle-ManifestVersion: 2
Bundle-Name: Protocol Buffers [Core]
Bundle-SymbolicName: com.google.protobuf
Bundle-Version: 3.20.1
Created-By: Apache Maven Bundle Plugin
Export-Package: com.google.protobuf;version="3.20.1"
Import-Package: sun.misc;resolution:=optional,com.google.protobuf;versio
n="[3.20,4)"
Require-Capability: osgi.ee;filter="(&(osgi.ee=JavaSE)(version=1.7))"
Tool: Bnd-3.0.0.201509101326
```

Found in path(s):

```
* /opt/cola/permits/1483182498_1669147240.6581564/0/protobuf-java-3-20-1-3-jar/META-INF/MANIFEST.MF
```

1.24 constraintlayout 2.1.4

1.24.1 Available under license :

No license file was found, but licenses were detected in source scan.

```
/*
* Copyright (C) 2017 The Android Open Source Project
*
* Licensed under the Apache License, Version 2.0 (the "License");
* you may not use this file except in compliance with the License.
* You may obtain a copy of the License at
*
* http://www.apache.org/licenses/LICENSE-2.0
*
*/
```

* Unless required by applicable law or agreed to in writing, software
* distributed under the License is distributed on an "AS IS" BASIS,
* WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
* See the License for the specific language governing permissions and
* limitations under the License.
*/

Found in path(s):

* /opt/cola/permits/1493901549_1677032761.60819/0/constraintlayout-2-1-4-sources-
jar/androidx/constraintlayout/widget/ConstraintAttribute.java
* /opt/cola/permits/1493901549_1677032761.60819/0/constraintlayout-2-1-4-sources-
jar/androidx/constraintlayout/widget/Constraints.java
* /opt/cola/permits/1493901549_1677032761.60819/0/constraintlayout-2-1-4-sources-
jar/androidx/constraintlayout/widget/Placeholder.java
*
/opt/cola/permits/1493901549_1677032761.60819/0/constraintlayout-2-1-4-sources-
jar/androidx/constraintlayout/widget/Barrier.java
No license file was found, but licenses were detected in source scan.

/*

* Copyright (C) 2021 The Android Open Source Project
*
* Licensed under the Apache License, Version 2.0 (the "License");
* you may not use this file except in compliance with the License.
* You may obtain a copy of the License at
*
* <http://www.apache.org/licenses/LICENSE-2.0>
*
* Unless required by applicable law or agreed to in writing, software
* distributed under the License is distributed on an "AS IS" BASIS,
* WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
* See the License for the specific language governing permissions and
* limitations under the License.
*/

Found in path(s):

* /opt/cola/permits/1493901549_1677032761.60819/0/constraintlayout-2-1-4-sources-
jar/androidx/constraintlayout/motion/widget/TransitionAdapter.java
* /opt/cola/permits/1493901549_1677032761.60819/0/constraintlayout-2-1-4-sources-
jar/androidx/constraintlayout/motion/widget/OnSwipe.java
* /opt/cola/permits/1493901549_1677032761.60819/0/constraintlayout-2-1-4-sources-
jar/androidx/constraintlayout/widget/Group.java
*
/opt/cola/permits/1493901549_1677032761.60819/0/constraintlayout-2-1-4-sources-
jar/androidx/constraintlayout/helper/widget/MotionPlaceholder.java
* /opt/cola/permits/1493901549_1677032761.60819/0/constraintlayout-2-1-4-sources-
jar/androidx/constraintlayout/helper/widget/Layer.java
* /opt/cola/permits/1493901549_1677032761.60819/0/constraintlayout-2-1-4-sources-

jar/androidx/constraintlayout/motion/widget/MotionHelper.java
* /opt/cola/permits/1493901549_1677032761.60819/0/constraintlayout-2-1-4-sources-
jar/androidx/constraintlayout/utils/widget/MockView.java
* /opt/cola/permits/1493901549_1677032761.60819/0/constraintlayout-2-1-4-sources-
jar/androidx/constraintlayout/widget/ConstraintHelper.java
* /opt/cola/permits/1493901549_1677032761.60819/0/constraintlayout-2-1-4-sources-
jar/androidx/constraintlayout/motion/utils/ViewState.java
* /opt/cola/permits/1493901549_1677032761.60819/0/constraintlayout-2-1-4-sources-
jar/androidx/constraintlayout/helper/widget/CircularFlow.java
No license file was found, but licenses were detected in source scan.

```
/*  
* Copyright (C) 2018 The Android Open Source Project  
*  
* Licensed under the Apache License, Version 2.0 (the "License");  
* you may not use this file except in compliance with the License.  
* You may obtain a copy of the License at  
*  
* http://www.apache.org/licenses/LICENSE-2.0  
*  
* Unless required by applicable law or agreed to in writing, software  
* distributed under the License is distributed on an "AS IS" BASIS,  
* WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.  
* See the License for the specific language governing permissions and  
* limitations under the License.  
*/
```

Found in path(s):

```
* /opt/cola/permits/1493901549_1677032761.60819/0/constraintlayout-2-1-4-sources-  
jar/androidx/constraintlayout/motion/widget/Animatable.java  
* /opt/cola/permits/1493901549_1677032761.60819/0/constraintlayout-2-1-4-sources-  
jar/androidx/constraintlayout/widget/ConstraintsChangedListener.java  
*  
/opt/cola/permits/1493901549_1677032761.60819/0/constraintlayout-2-1-4-sources-  
jar/androidx/constraintlayout/motion/widget/MotionLayout.java  
* /opt/cola/permits/1493901549_1677032761.60819/0/constraintlayout-2-1-4-sources-  
jar/androidx/constraintlayout/motion/widget/KeyTimeCycle.java  
* /opt/cola/permits/1493901549_1677032761.60819/0/constraintlayout-2-1-4-sources-  
jar/androidx/constraintlayout/motion/widget/KeyPosition.java  
* /opt/cola/permits/1493901549_1677032761.60819/0/constraintlayout-2-1-4-sources-  
jar/androidx/constraintlayout/motion/widget/KeyTrigger.java  
* /opt/cola/permits/1493901549_1677032761.60819/0/constraintlayout-2-1-4-sources-  
jar/androidx/constraintlayout/motion/widget/KeyFrames.java  
* /opt/cola/permits/1493901549_1677032761.60819/0/constraintlayout-2-1-4-sources-  
jar/androidx/constraintlayout/motion/widget/MotionScene.java  
* /opt/cola/permits/1493901549_1677032761.60819/0/constraintlayout-2-1-4-sources-  
jar/androidx/constraintlayout/motion/widget/Key.java  
* /opt/cola/permits/1493901549_1677032761.60819/0/constraintlayout-2-1-4-sources-
```



```
jar/androidx/constraintlayout/motion/widget/TouchResponse.java
*
/opt/cola/permits/1493901549_1677032761.60819/0/constraintlayout-2-1-4-sources-
jar/androidx/constraintlayout/widget/ConstraintProperties.java
* /opt/cola/permits/1493901549_1677032761.60819/0/constraintlayout-2-1-4-sources-
jar/androidx/constraintlayout/motion/widget/Debug.java
* /opt/cola/permits/1493901549_1677032761.60819/0/constraintlayout-2-1-4-sources-
jar/androidx/constraintlayout/utils/widget/ImageFilterView.java
* /opt/cola/permits/1493901549_1677032761.60819/0/constraintlayout-2-1-4-sources-
jar/androidx/constraintlayout/motion/widget/KeyCycle.java
* /opt/cola/permits/1493901549_1677032761.60819/0/constraintlayout-2-1-4-sources-
jar/androidx/constraintlayout/utils/widget/MotionTelltale.java
* /opt/cola/permits/1493901549_1677032761.60819/0/constraintlayout-2-1-4-sources-
jar/androidx/constraintlayout/widget/StateSet.java
* /opt/cola/permits/1493901549_1677032761.60819/0/constraintlayout-2-1-4-sources-
jar/androidx/constraintlayout/motion/widget/KeyPositionBase.java
*
/opt/cola/permits/1493901549_1677032761.60819/0/constraintlayout-2-1-4-sources-
jar/androidx/constraintlayout/motion/utils/StopLogic.java
* /opt/cola/permits/1493901549_1677032761.60819/0/constraintlayout-2-1-4-sources-
jar/androidx/constraintlayout/motion/widget/MotionController.java
* /opt/cola/permits/1493901549_1677032761.60819/0/constraintlayout-2-1-4-sources-
jar/androidx/constraintlayout/widget/VirtualLayout.java
* /opt/cola/permits/1493901549_1677032761.60819/0/constraintlayout-2-1-4-sources-
jar/androidx/constraintlayout/motion/widget/DesignTool.java
* /opt/cola/permits/1493901549_1677032761.60819/0/constraintlayout-2-1-4-sources-
jar/androidx/constraintlayout/motion/widget/Key Attributes.java
* /opt/cola/permits/1493901549_1677032761.60819/0/constraintlayout-2-1-4-sources-
jar/androidx/constraintlayout/utils/widget/ImageFilterButton.java
* /opt/cola/permits/1493901549_1677032761.60819/0/constraintlayout-2-1-4-sources-
jar/androidx/constraintlayout/motion/widget/MotionPaths.java
*
/opt/cola/permits/1493901549_1677032761.60819/0/constraintlayout-2-1-4-sources-
jar/androidx/constraintlayout/widget/ConstraintLayoutStates.java
* /opt/cola/permits/1493901549_1677032761.60819/0/constraintlayout-2-1-4-sources-
jar/androidx/constraintlayout/motion/widget/CustomFloatAttributes.java
* /opt/cola/permits/1493901549_1677032761.60819/0/constraintlayout-2-1-4-sources-
jar/androidx/constraintlayout/motion/widget/MotionConstrainedPoint.java
No license file was found, but licenses were detected in source scan.
```

```
/*
* Copyright (C) 2020 The Android Open Source Project
*
* Licensed under the Apache License, Version 2.0 (the "License");
* you may not use this file except in compliance with the License.
* You may obtain a copy of the License at
*
* http://www.apache.org/licenses/LICENSE-2.0
```

*
* Unless required by applicable law or agreed to in writing, software
* distributed under the License is distributed on an "AS IS" BASIS,
* WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
* See the License for the specific language governing permissions and
* limitations under the License.
*/

Found in path(s):

* /opt/cola/permits/1493901549_1677032761.60819/0/constraintlayout-2-1-4-sources-
jar/androidx/constraintlayout/motion/utils/ViewOscillator.java
* /opt/cola/permits/1493901549_1677032761.60819/0/constraintlayout-2-1-4-sources-
jar/androidx/constraintlayout/helper/widget/MotionEvent.java
* /opt/cola/permits/1493901549_1677032761.60819/0/constraintlayout-2-1-4-sources-
jar/androidx/constraintlayout/widget/ReactiveGuide.java
*

/opt/cola/permits/1493901549_1677032761.60819/0/constraintlayout-2-1-4-sources-
jar/androidx/constraintlayout/motion/widget/ViewTransition.java
* /opt/cola/permits/1493901549_1677032761.60819/0/constraintlayout-2-1-4-sources-
jar/androidx/constraintlayout/motion/utils/ViewTimeCycle.java
* /opt/cola/permits/1493901549_1677032761.60819/0/constraintlayout-2-1-4-sources-
jar/androidx/constraintlayout/utils/widget/MotionButton.java
* /opt/cola/permits/1493901549_1677032761.60819/0/constraintlayout-2-1-4-sources-
jar/androidx/constraintlayout/motion/utils/ViewSpline.java
* /opt/cola/permits/1493901549_1677032761.60819/0/constraintlayout-2-1-4-sources-
jar/androidx/constraintlayout/motion/widget/ViewTransitionController.java
* /opt/cola/permits/1493901549_1677032761.60819/0/constraintlayout-2-1-4-sources-
jar/androidx/constraintlayout/motion/widget/FloatLayout.java
*

/opt/cola/permits/1493901549_1677032761.60819/0/constraintlayout-2-1-4-sources-
jar/androidx/constraintlayout/utils/widget/MotionLabel.java
* /opt/cola/permits/1493901549_1677032761.60819/0/constraintlayout-2-1-4-sources-
jar/androidx/constraintlayout/widget/SharedValues.java
* /opt/cola/permits/1493901549_1677032761.60819/0/constraintlayout-2-1-4-sources-
jar/androidx/constraintlayout/helper/widget/Carousel.java
* /opt/cola/permits/1493901549_1677032761.60819/0/constraintlayout-2-1-4-sources-
jar/androidx/constraintlayout/motion/widget/MotionHelperInterface.java

No license file was found, but licenses were detected in source scan.

/*
* Copyright (C) 2016 The Android Open Source Project
*
* Licensed under the Apache License, Version 2.0 (the "License");
* you may not use this file except in compliance with the License.
* You may obtain a copy of the License at
*
* <http://www.apache.org/licenses/LICENSE-2.0>
*
*/

* Unless required by applicable law or agreed to in writing, software
* distributed under the License is distributed on an "AS IS" BASIS,
* WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
* See the License for the specific language governing permissions and
* limitations under the License.
*/

Found in path(s):

* /opt/cola/permits/1493901549_1677032761.60819/0/constraintlayout-2-1-4-sources-jar/androidx/constraintlayout/widget/ConstraintSet.java
No license file was found, but licenses were detected in source scan.

/*

* Copyright (C) 2015 The Android Open Source Project

*

* Licensed under the Apache License, Version 2.0 (the "License");
* you may not use this file except in compliance with the License.
* You may obtain a copy of the License at

*

* <http://www.apache.org/licenses/LICENSE-2.0>

*

* Unless required by applicable law or agreed to in writing, software
* distributed under the License is distributed on an "AS IS" BASIS,
* WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
* See the License for the specific language governing permissions and
* limitations under the License.

*/

Found in path(s):

* /opt/cola/permits/1493901549_1677032761.60819/0/constraintlayout-2-1-4-sources-jar/androidx/constraintlayout/widget/ConstraintLayout.java
* /opt/cola/permits/1493901549_1677032761.60819/0/constraintlayout-2-1-4-sources-jar/androidx/constraintlayout/widget/Guideline.java
No license file was found, but licenses were detected in source scan.

/*

* Copyright (C) 2019 The Android Open Source Project

*

* Licensed under the Apache License, Version 2.0 (the "License");
* you may not use this file except in compliance with the License.
* You may obtain a copy of the License at

*

* <http://www.apache.org/licenses/LICENSE-2.0>

*

* Unless required by applicable law or agreed to in writing, software
* distributed under the License is distributed on an "AS IS" BASIS,
* WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
* See the License for the specific language governing permissions and

* limitations under the License.

*/

Found in path(s):

* /opt/cola/permits/1493901549_1677032761.60819/0/constraintlayout-2-1-4-sources-jar/androidx/constraintlayout/motion/widget/TransitionBuilder.java

* /opt/cola/permits/1493901549_1677032761.60819/0/constraintlayout-2-1-4-sources-jar/androidx/constraintlayout/helper/widget/Flow.java

* /opt/cola/permits/1493901549_1677032761.60819/0/constraintlayout-2-1-4-sources-jar/androidx/constraintlayout/motion/widget/MotionInterpolator.java

1.25 safestring 2.0

1.25.1 Available under license :

No license file was found, but licenses were detected in source scan.

/*-----

* strstr_s.c

*

* November 2008, Bo Berry

*

* Copyright (c) 2008-2010, 2013 by Cisco Systems, Inc.

* All rights reserved.

/*-----

*/

Found in path(s):

* /opt/cola/permits/1502360938_1670536039.5216763/0/safe-lib-2-0-1-tar-gz/safe_lib_2_0/src/safe_string/strstr_s.c

No license file was found, but licenses were detected in source scan.

/*-----

* safe_string.h

*

* November 2008, Bo Berry

*

* Copyright (c) 2008-2010, 2013 by Cisco Systems, Inc.

*

* Permission is hereby granted, free of charge, to any person

* obtaining a copy of this software and associated documentation

* files (the "Software"), to deal in the Software without restriction,

* including without limitation the rights to use, copy, modify, merge,

* publish, distribute, sublicense, and/or sell copies of the Software,

* and to permit persons to whom the Software is furnished to do so,

* subject to the following conditions:

*

* The above copyright notice and this permission notice shall be

* included in all copies or substantial portions of the Software.

```

*
* THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND,
* EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES
* OF MERCHANTABILITY,
* FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT.
* IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY
* CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT,
* TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE
* SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.
*-----
*/

```

Found in path(s):

```

* /opt/cola/permits/1502360938_1670536039.5216763/0/safe-lib-2-0-1-tar-gz/safe_lib_2_0/include/safe_string.h
No license file was found, but licenses were detected in source scan.

```

```

/*-----
* mem_primitives_lib.c - Unguarded Memory Copy Routines
*
* February 2005, Bo Berry
*
* Copyright (c) 2005-2010, 2013 by Cisco Systems, Inc.
*
* Permission is hereby granted, free of charge, to any person
* obtaining a copy of this software and associated documentation
* files (the "Software"), to deal in the Software without
* restriction, including without limitation the rights to use,
* copy, modify, merge, publish, distribute, sublicense, and/or
* sell copies of the Software, and to permit persons to whom the
* Software is furnished to do so, subject to the following
* conditions:
*
* The above copyright notice and this permission notice shall be
* included in all copies or substantial portions of the Software.
*
* THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND,
* EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED
* TO THE WARRANTIES
* OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND
* NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT
* HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY,
* WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING
* FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR
* OTHER DEALINGS IN THE SOFTWARE.
*-----
*/

```

Found in path(s):

* /opt/cola/permits/1502360938_1670536039.5216763/0/safe-lib-2-0-1-tar-gz/safe_lib_2_0/src/safe_string/mem_primitives_lib.c

No license file was found, but licenses were detected in source scan.

```
/*-----  
* strcat_s.c  
*  
* October 2008, Bo Berry  
*  
* Copyright (c) 2008-2010, 2013 by Cisco Systems, Inc.  
* All rights Reserved.  
*/
```

Found in path(s):

* /opt/cola/permits/1502360938_1670536039.5216763/0/safe-lib-2-0-1-tar-gz/safe_lib_2_0/src/safe_string/strcat_s.c

No license file was found, but licenses were detected in source scan.

```
/*-----  
* strpbrk_s.c  
*  
* November 2008, Bo Berry  
*  
* Copyright (c) 2008-2010, 2013 by Cisco Systems, Inc.  
* All rights Reserved.  
*-----  
*/
```

Found in path(s):

* /opt/cola/permits/1502360938_1670536039.5216763/0/safe-lib-2-0-1-tar-gz/safe_lib_2_0/src/safe_string/strpbrk_s.c

No license file was found, but licenses were detected in source scan.

```
/*-----  
* safe_str_constraint.h  
*  
* October 2008, Bo Berry  
*  
* Copyright (c) 2008-2010, 2013 by Cisco Systems, Inc.  
*  
* Permission is hereby granted, free of charge, to any person  
* obtaining a copy of this software and associated documentation  
* files (the "Software"), to deal in the Software without restriction,  
* including without limitation the rights to use, copy, modify, merge,  
* publish, distribute, sublicense, and/or sell copies of the Software,  
* and to permit persons to whom the Software is furnished to do so,  
* subject to the following conditions:  
*  
*-----  
*/
```

* The above copyright notice and this permission notice shall be
 * included in all copies or substantial portions of the Software.
 *
 * THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND,
 * EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES
 * OF MERCHANTABILITY,
 FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT.
 * IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY
 * CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT,
 * TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE
 * SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.
 *-----
 */

Found in path(s):

* /opt/cola/permits/1502360938_1670536039.5216763/0/safe-lib-2-0-1-tar-
 gz/safe_lib_2_0/src/safe_string/safe_str_constraint.h
 No license file was found, but licenses were detected in source scan.

/*-----
 * strisupercase_s.c
 *
 * October 2008, Bo Berry
 *
 * Copyright (c) 2008-2010, 2013 by Cisco Systems, Inc.
 * All rights reserved.
 *-----
 */

Found in path(s):

* /opt/cola/permits/1502360938_1670536039.5216763/0/safe-lib-2-0-1-tar-
 gz/safe_lib_2_0/src/safe_string/strisupercase_s.c
 No license file was found, but licenses were detected in source scan.

/*-----
 * mem_primitives_lib.h - Unguarded Memory Copy Routines
 *
 * October 2005, Bo Berry
 *
 * Copyright (c) 2005-2010, 2013 by Cisco Systems, Inc.
 *
 * Permission is hereby granted, free of charge, to any person
 * obtaining a copy of this software and associated documentation
 * files (the "Software"), to deal in the Software without restriction,
 * including without limitation the rights to use, copy, modify, merge,
 * publish, distribute, sublicense, and/or sell copies of the Software,
 * and to permit persons to whom the Software is furnished to do so,
 * subject to the following conditions:

```

*
* The above copyright notice and this permission notice shall be
* included in all copies or substantial portions of the Software.
*
* THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND,
* EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE
* WARRANTIES
* OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT.
* IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY
* CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT,
* TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE
* SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.
*-----
*/

```

Found in path(s):

```

* /opt/cola/permits/1502360938_1670536039.5216763/0/safe-lib-2-0-1-tar-
* gz/safe_lib_2_0/include/mem_primitives_lib.h

```

No license file was found, but licenses were detected in source scan.

```

/*-----
* safe_mem_constraint.h
*
* October 2008, Bo Berry
*
* Copyright (c) 2008-2010, 2013 by Cisco Systems, Inc.
*
* Permission is hereby granted, free of charge, to any person
* obtaining a copy of this software and associated documentation
* files (the "Software"), to deal in the Software without restriction,
* including without limitation the rights to use, copy, modify, merge,
* publish, distribute, sublicense, and/or sell copies of the Software,
* and to permit persons to whom the Software is furnished to do so,
* subject to the following conditions:
*
* The above copyright notice and this permission notice shall be
* included in all copies or substantial portions of the Software.
*
* THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND,
* EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES
* OF MERCHANTABILITY,
* FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT.
* IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY
* CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT,
* TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE
* SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.
*-----
*/

```


Found in path(s):

* /opt/cola/permits/1502360938_1670536039.5216763/0/safe-lib-2-0-1-tar-gz/safe_lib_2_0/src/safe_string/safe_mem_constraint.h

No license file was found, but licenses were detected in source scan.

/*-----

* safe_limits.h -- limits include for portability

*

* February 2009, Bo Berry

*

* Copyright (c) 2009-2010, 2013 by Cisco Systems, Inc.

*

* Permission is hereby granted, free of charge, to any person

* obtaining a copy of this software and associated documentation

* files (the "Software"), to deal in the Software without restriction,

* including without limitation the rights to use, copy, modify, merge,

* publish, distribute, sublicense, and/or sell copies of the Software,

* and to permit persons to whom the Software is furnished to do so,

* subject to the following conditions:

*

* The above copyright notice and this permission notice shall be

* included in all copies or substantial portions of the Software.

*

* THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND,

* EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE

WARRANTIES

* OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT.

* IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY

* CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT,

* TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE

* SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

/*-----

*/

Found in path(s):

* /opt/cola/permits/1502360938_1670536039.5216763/0/safe-lib-2-0-1-tar-gz/safe_lib_2_0/include/safe_limits.h

No license file was found, but licenses were detected in source scan.

/*-----

* safe_types.h -- types include for portability

*

* March 2007, Bo Berry

*

* Copyright (c) 2007-2010, 2013 by Cisco Systems, Inc.

*

* Permission is hereby granted, free of charge, to any person

* obtaining a copy of this software and associated documentation

```

* files (the "Software"), to deal in the Software without restriction,
* including without limitation the rights to use, copy, modify, merge,
* publish, distribute, sublicense, and/or sell copies of the Software,
* and to permit persons to whom the Software is furnished to do so,
* subject to the following conditions:
*
* The above copyright notice and this permission notice shall be
* included in all copies or substantial portions of the Software.
*
* THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND,
* EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES
* OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT.
* IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY
* CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT,
* TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE
* SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.
*-----
*/

```

Found in path(s):

```

* /opt/cola/permits/1502360938_1670536039.5216763/0/safe-lib-2-0-1-tar-gz/safe_lib_2_0/include/safe_types.h
No license file was found, but licenses were detected in source scan.

```

```

/*-----
* strzero_s.c
*
* October 2008, Bo Berry
*
* Copyright (c) 2008-2010, 2013 by Cisco Systems, Inc.
* All Rights Reserved.
*-----
*/

```

Found in path(s):

```

* /opt/cola/permits/1502360938_1670536039.5216763/0/safe-lib-2-0-1-tar-
gz/safe_lib_2_0/src/safe_string/strzero_s.c
No license file was found, but licenses were detected in source scan.

```

```

/*-----
* strncat_s.c
*
* October 2008, Bo Berry
*
* Copyright (c) 2008-2010, 2013 by Cisco Systems, Inc.
* All Rights reserved
*-----
*/

```

Found in path(s):

```
* /opt/cola/permits/1502360938_1670536039.5216763/0/safe-lib-2-0-1-tar-  
gz/safe_lib_2_0/src/safe_string/strncat_s.c
```

No license file was found, but licenses were detected in source scan.

```
/*-----  
* strcasestr_s.c  
*  
* November 2008, Bo Berry  
*  
* Copyright (c) 2008-2010, 2012-2013 by Cisco Systems, Inc.  
* All rights Reserved.  
*/
```

Found in path(s):

```
* /opt/cola/permits/1502360938_1670536039.5216763/0/safe-lib-2-0-1-tar-  
gz/safe_lib_2_0/src/safe_string/strcasestr_s.c
```

No license file was found, but licenses were detected in source scan.

```
/*-----  
* safe_lib.h -- library include for portability  
*  
* February 2009, Bo Berry  
*  
* Copyright (c) 2009-2010, 2013 by Cisco Systems, Inc.  
*  
* Permission is hereby granted, free of charge, to any person  
* obtaining a copy of this software and associated documentation  
* files (the "Software"), to deal in the Software without restriction,  
* including without limitation the rights to use, copy, modify, merge,  
* publish, distribute, sublicense, and/or sell copies of the Software,  
* and to permit persons to whom the Software is furnished to do so,  
* subject to the following conditions:  
*  
* The above copyright notice and this permission notice shall be  
* included in all copies or substantial portions of the Software.  
*  
* THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND,  
* EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES  
* OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT.  
* IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY  
* CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT,  
* TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE  
* SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.  
*-----  
*/
```

Found in path(s):

* /opt/cola/permits/1502360938_1670536039.5216763/0/safe-lib-2-0-1-tar-gz/safe_lib_2_0/include/safe_lib.h

No license file was found, but licenses were detected in source scan.

```
/*-----  
* safe_str_lib.h -- Safe C Library String APIs  
*  
* October 2008, Bo Berry  
*  
* Copyright (c) 2008-2010, 2013 by Cisco Systems, Inc.  
*  
* Permission is hereby granted, free of charge, to any person  
* obtaining a copy of this software and associated documentation  
* files (the "Software"), to deal in the Software without restriction,  
* including without limitation the rights to use, copy, modify, merge,  
* publish, distribute, sublicense, and/or sell copies of the Software,  
* and to permit persons to whom the Software is furnished to do so,  
* subject to the following conditions:  
*  
* The above copyright notice and this permission notice shall be  
* included in all copies or substantial portions of the Software.  
*  
* THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND,  
* EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO  
* THE WARRANTIES  
* OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT.  
* IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY  
* CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT,  
* TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE  
* SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.  
*-----  
*/
```

Found in path(s):

* /opt/cola/permits/1502360938_1670536039.5216763/0/safe-lib-2-0-1-tar-gz/safe_lib_2_0/include/safe_str_lib.h

No license file was found, but licenses were detected in source scan.

```
/*-----  
* strcopyfdin_s.c  
*  
* November 2008, Bo Berry  
*  
* Copyright (c) 2008-2010, 2013 by Cisco Systems, Inc.  
* All rights Reserved.  
*/
```

Found in path(s):

* /opt/cola/permits/1502360938_1670536039.5216763/0/safe-lib-2-0-1-tar-

gz/safe_lib_2_0/src/safe_string/strcpyfldin_s.c

No license file was found, but licenses were detected in source scan.

```
/*-----  
* strljustify_s.c  
*  
* November 2008, Bo Berry  
*  
* Copyright (c) 2008-2010, 2013 by Cisco Systems, Inc.  
* All rights Reserved  
*-----  
*/
```

Found in path(s):

* /opt/cola/permits/1502360938_1670536039.5216763/0/safe-lib-2-0-1-tar-gz/safe_lib_2_0/src/safe_string/strljustify_s.c

No license file was found, but licenses were detected in source scan.

```
/*-----  
* strncpy_s.c  
*  
* October 2008, Bo Berry  
*  
* Copyright (c) 2008-2010, 2013 by Cisco Systems, Inc.  
* All rights Reserved.  
*-----  
*/
```

Found in path(s):

* /opt/cola/permits/1502360938_1670536039.5216763/0/safe-lib-2-0-1-tar-gz/safe_lib_2_0/src/safe_string/strncpy_s.c

No license file was found, but licenses were detected in source scan.

```
/*-----  
* strlastchar_s.c  
*  
* November 2008, Bo Berry  
*  
* Copyright (c) 2008-2010, 2013 by Cisco Systems, Inc.  
* All rights reserved  
*/
```

Found in path(s):

* /opt/cola/permits/1502360938_1670536039.5216763/0/safe-lib-2-0-1-tar-gz/safe_lib_2_0/src/safe_string/strlastchar_s.c

No license file was found, but licenses were detected in source scan.

```
/*-----
```

```

* safe_mem_lib.h -- Safe C Library Memory APIs
*
* October 2008, Bo Berry
*
* Copyright (c) 2008-2010, 2013 by Cisco Systems, Inc.
*
* Permission is hereby granted, free of charge, to any person
* obtaining a copy of this software and associated documentation
* files (the "Software"), to deal in the Software without restriction,
* including without limitation the rights to use, copy, modify, merge,
* publish, distribute, sublicense, and/or sell copies of the Software,
* and to permit persons to whom the Software is furnished to do so,
* subject to the following conditions:
*
* The above copyright notice and this permission notice shall be
* included in all copies or substantial portions of the Software.
*
* THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND,
* EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES
* OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT.
* IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY
* CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT,
* TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE
* SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.
*-----
*/

```

Found in path(s):

```

* /opt/cola/permits/1502360938_1670536039.5216763/0/safe-lib-2-0-1-tar-gz/safe_lib_2_0/include/safe_mem_lib.h
No license file was found, but licenses were detected in source scan.

```

```

/*-----
* strispassword_s.c
*
* October 2008, Bo Berry
*
* Copyright (c) 2008-2010, 2013 by Cisco Systems, Inc.
* All rights Reserved.
*-----
*/

```

Found in path(s):

```

* /opt/cola/permits/1502360938_1670536039.5216763/0/safe-lib-2-0-1-tar-
gz/safe_lib_2_0/src/safe_string/strispassword_s.c
No license file was found, but licenses were detected in source scan.

```

```

/*-----
* strtok_s.c

```

*
* October 2008, Bo Berry
*
* Copyright (c) 2008-2010, 2013 by Cisco Systems, Inc.
* All rights reserved.
*-----
*/

Found in path(s):

* /opt/cola/permits/1502360938_1670536039.5216763/0/safe-lib-2-0-1-tar-gz/safe_lib_2_0/src/safe_string/strtok_s.c

No license file was found, but licenses were detected in source scan.

/*-----
* strspn_s.c
*
* November 2008, Bo Berry
*
* Copyright (c) 2008-2010, 2013 by Cisco Systems, Inc.
* All rights Reserved.
*-----
*/

Found in path(s):

* /opt/cola/permits/1502360938_1670536039.5216763/0/safe-lib-2-0-1-tar-gz/safe_lib_2_0/src/safe_string/strspn_s.c

No license file was found, but licenses were detected in source scan.

/*-----
* strislowercase_s.c
*
* February 2005, Bo Berry
*
* Copyright (c) 2008-2010, 2013 by Cisco Systems, Inc.
* All rights Reserved.
*-----
*/

Found in path(s):

* /opt/cola/permits/1502360938_1670536039.5216763/0/safe-lib-2-0-1-tar-gz/safe_lib_2_0/src/safe_string/strislowercase_s.c

No license file was found, but licenses were detected in source scan.

/*-----
* stremovews_s.c
*
* November 2008, Bo Berry
*
*/

* Copyright (c) 2008-2010, 2013 by Cisco Systems, Inc.

* All rights reserved.

*-----

*/

Found in path(s):

* /opt/cola/permits/1502360938_1670536039.5216763/0/safe-lib-2-0-1-tar-gz/safe_lib_2_0/src/safe_string/stremovews_s.c

No license file was found, but licenses were detected in source scan.

/*-----

* strishex_s.c

*

* October 2008, Bo Berry

*

* Copyright (c) 2008-2010, 2013 by Cisco Systems, Inc.

* All Rights reserved.

*/

Found in path(s):

* /opt/cola/permits/1502360938_1670536039.5216763/0/safe-lib-2-0-1-tar-gz/safe_lib_2_0/src/safe_string/strishex_s.c

No license file was found, but licenses were detected in source scan.

/*-----

* strprefix_s.c

*

* November 2008, Bo Berry

*

* Copyright (c) 2008-2010, 2013 by Cisco Systems, Inc.

* All rights reserved

*-----

*/

Found in path(s):

* /opt/cola/permits/1502360938_1670536039.5216763/0/safe-lib-2-0-1-tar-gz/safe_lib_2_0/src/safe_string/strprefix_s.c

No license file was found, but licenses were detected in source scan.

/*-----

* strlastsame_s.c

*

* November 2008, Bo Berry

*

* Copyright (c) 2008-2010, 2013 by Cisco Systems, Inc.

* All rights reserved

*-----

*/

Found in path(s):

```
* /opt/cola/permits/1502360938_1670536039.5216763/0/safe-lib-2-0-1-tar-gz/safe_lib_2_0/src/safe_string/strlastsame_s.c
```

1.26 re2 2022-06-01

1.26.1 Available under license :

```
// Copyright (c) 2009 The RE2 Authors. All rights reserved.
//
// Redistribution and use in source and binary forms, with or without
// modification, are permitted provided that the following conditions are
// met:
//
// * Redistributions of source code must retain the above copyright
// notice, this list of conditions and the following disclaimer.
// * Redistributions in binary form must reproduce the above
// copyright notice, this list of conditions and the following disclaimer
// in the documentation and/or other materials provided with the
// distribution.
// * Neither the name of Google Inc. nor the names of its
// contributors may be used to endorse or promote products derived from
// this software without specific prior written permission.
//
// THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS
// "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT
// LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR
// A PARTICULAR PURPOSE
// ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT
// OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL,
// SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT
// LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE,
// DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY
// THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT
// (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE
// OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.
# This is the official list of people who can contribute
# (and typically have contributed) code to the RE2 repository.
# The AUTHORS file lists the copyright holders; this file
# lists people. For example, Google employees are listed here
# but not in AUTHORS, because Google holds the copyright.
#
# The submission process automatically checks to make sure
# that people submitting code are listed in this file (by email address).
#
# Names should be added to this file only after verifying that
# the individual or the individual's organization has agreed to
```

```
# the appropriate Contributor License Agreement, found here:
#
# http://code.google.com/legal/individual-cla-v1.0.html
# http://code.google.com/legal/corporate-cla-v1.0.html
#
# The agreement for individuals can be filled out on the web.
#
# When adding J Random Contributor's name to this file,
# either J's name or J's organization's name should be
# added to the AUTHORS file, depending on whether the
# individual or corporate
# CLA was used.

# Names should be added to this file like so:
# Name <email address>

# Please keep the list sorted.
```

```
Dominic Battr <battr@chromium.org>
Doug Kwan <dougkwan@google.com>
Dmitriy Vyukov <dvyukov@google.com>
John Millikin <jmillikin@gmail.com>
Mike Nazarewicz <mpn@google.com>
Nico Weber <thakis@chromium.org>
Pawel Hajdan <phajdan.jr@gmail.com>
Rob Pike <r@google.com>
Russ Cox <rsc@swtch.com>
Sanjay Ghemawat <sanjay@google.com>
Stefano Rivera <stefano.rivera@gmail.com>
Srinivasan Venkatachary <vsri@google.com>
Viatcheslav Ostapenko <sl.ostapenko@samsung.com>
```

Apache License
Version 2.0, January 2004
<http://www.apache.org/licenses/>

TERMS AND CONDITIONS FOR USE, REPRODUCTION, AND DISTRIBUTION

1. Definitions.

"License" shall mean the terms and conditions for use, reproduction, and distribution as defined by Sections 1 through 9 of this document.

"Licensor" shall mean the copyright owner or entity authorized by the copyright owner that is granting the License.

"Legal Entity" shall mean the union of the acting entity and all other entities that control, are controlled by, or are under common control with that entity. For the purposes of this definition,

"control" means (i) the power, direct or indirect, to cause the direction or management of such entity, whether by contract or otherwise, or (ii) ownership of fifty percent (50%) or more of the outstanding shares, or (iii) beneficial ownership of such entity.

"You" (or "Your") shall mean an individual or Legal Entity exercising permissions granted by this License.

"Source" form shall mean the preferred form for making modifications, including but not limited to software source code, documentation source, and configuration files.

"Object" form shall mean any form resulting from mechanical transformation or translation of a Source form, including but not limited to compiled object code, generated documentation, and conversions to other media types.

"Work" shall mean the work of authorship, whether in Source or Object form, made available under the License, as indicated by a copyright notice that is included in or attached to the work (an example is provided in the Appendix below).

"Derivative Works" shall mean any work, whether in Source or Object form, that is based on (or derived from) the Work and for which the editorial revisions, annotations, elaborations, or other modifications represent, as a whole, an original work of authorship. For the purposes of this License, Derivative Works shall not include works that remain separable from, or merely link (or bind by name) to the interfaces of, the Work and Derivative Works thereof.

"Contribution" shall mean any work of authorship, including the original version of the Work and any modifications or additions to that Work or Derivative Works thereof, that is intentionally submitted to Licensor for inclusion in the Work by the copyright owner or by an individual or Legal Entity authorized to submit on behalf of the copyright owner. For the purposes of this definition, "submitted" means any form of electronic, verbal, or written communication sent to the Licensor or its representatives, including but not limited to communication on electronic mailing lists, source code control systems, and issue tracking systems that are managed by, or on behalf of, the Licensor for the purpose of discussing and improving the Work, but excluding communication that is conspicuously marked or otherwise designated in writing by the copyright owner as "Not a Contribution."

"Contributor" shall mean Licensor and any individual or Legal Entity on behalf of whom a Contribution has been received by Licensor and

subsequently incorporated within the Work.

2. Grant of Copyright License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable copyright license to reproduce, prepare Derivative Works of, publicly display, publicly perform, sublicense, and distribute the Work and such Derivative Works in Source or Object form.

3. Grant of Patent License. Subject to the terms and conditions of this

License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable (except as stated in this section) patent license to make, have made, use, offer to sell, sell, import, and otherwise transfer the Work, where such license applies only to those patent claims licensable by such Contributor that are necessarily infringed by their Contribution(s) alone or by combination of their Contribution(s) with the Work to which such Contribution(s) was submitted. If You institute patent litigation against any entity (including a cross-claim or counterclaim in a lawsuit) alleging that the Work or a Contribution incorporated within the Work constitutes direct or contributory patent infringement, then any patent licenses granted to You under this License for that Work shall terminate as of the date such litigation is filed.

4. Redistribution. You may reproduce and distribute copies of the

Work or Derivative Works thereof in any medium, with or without modifications, and in Source or Object form, provided that You meet the following conditions:

- (a) You must give any other recipients of the Work or Derivative Works a copy of this License; and
- (b) You must cause any modified files to carry prominent notices stating that You changed the files; and
- (c) You must retain, in the Source form of any Derivative Works that You distribute, all copyright, patent, trademark, and attribution notices from the Source form of the Work, excluding those notices that do not pertain to any part of the Derivative Works; and
- (d) If the Work includes a "NOTICE" text file as part of its distribution, then any Derivative Works that You distribute must include a readable copy of the attribution notices contained within such NOTICE file, excluding

those notices that do not

pertain to any part of the Derivative Works, in at least one of the following places: within a NOTICE text file distributed as part of the Derivative Works; within the Source form or documentation, if provided along with the Derivative Works; or, within a display generated by the Derivative Works, if and wherever such third-party notices normally appear. The contents of the NOTICE file are for informational purposes only and do not modify the License. You may add Your own attribution notices within Derivative Works that You distribute, alongside or as an addendum to the NOTICE text from the Work, provided that such additional attribution notices cannot be construed as modifying the License.

You may add Your own copyright statement to Your modifications and may provide additional or different license terms and conditions for use, reproduction, or distribution of Your modifications, or for any such Derivative Works as a whole, provided Your use, reproduction, and distribution of the Work otherwise complies with the conditions stated in this License.

5. Submission of Contributions. Unless You explicitly state otherwise, any Contribution intentionally submitted for inclusion in the Work by You to the Licensor shall be under the terms and conditions of this License, without any additional terms or conditions.

Notwithstanding the above, nothing herein shall supersede or modify the terms of any separate license agreement you may have executed with Licensor regarding such Contributions.

6. Trademarks. This License does not grant permission to use the trade names, trademarks, service marks, or product names of the Licensor, except as required for reasonable and customary use in describing the origin of the Work and reproducing

the content of the NOTICE file.

7. Disclaimer of Warranty. Unless required by applicable law or agreed to in writing, Licensor provides the Work (and each Contributor provides its Contributions) on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied, including, without limitation, any warranties or conditions of TITLE, NON-INFRINGEMENT, MERCHANTABILITY, or FITNESS FOR A PARTICULAR PURPOSE. You are solely responsible for determining the appropriateness of using or redistributing the Work and assume any risks associated with Your exercise of permissions under this License.

8. Limitation of Liability. In no event and under no legal theory, whether in tort (including negligence), contract, or otherwise, unless required by applicable law (such as deliberate and grossly

negligent acts) or agreed to in writing, shall any Contributor be liable to You for damages, including any direct, indirect, special, incidental, or consequential damages of any character arising as a result of this License or out of the use or inability to use the Work (including but not limited to damages for loss of goodwill, work stoppage, computer failure or malfunction, or any and all other commercial damages or losses), even if such Contributor has been advised of the possibility of such damages.

9. Accepting Warranty or Additional Liability. While redistributing the Work or Derivative Works thereof, You may choose to offer, and charge a fee for, acceptance of support, warranty, indemnity, or other liability obligations and/or rights consistent with this License. However, in accepting such obligations, You may act only on Your own behalf and on Your sole responsibility, not on behalf of any other Contributor, and only if You agree to indemnify, defend, and hold each Contributor harmless for any liability incurred by, or claims asserted against, such Contributor by reason of your accepting any such warranty or additional liability.

END OF TERMS AND CONDITIONS

APPENDIX: How to apply the Apache License to your work.

To apply the Apache License to your work, attach the following boilerplate notice, with the fields enclosed by brackets "[]" replaced with your own identifying information. (Don't include the brackets!) The text should be enclosed in the appropriate comment syntax for the file format. We also recommend that a file or class name and description of purpose be included on the same "printed page" as the copyright notice for easier identification within third-party archives.

Copyright [yyyy] [name of copyright owner]

Licensed under the Apache License, Version 2.0 (the "License");
you may not use this file except in compliance with the License.
You may obtain a copy of the License at

<http://www.apache.org/licenses/LICENSE-2.0>

Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License.

--- LLVM Exceptions to the Apache 2.0 License ----

As an exception, if, as a result of your compiling your source code, portions of this Software are embedded into an Object form of such source code, you may redistribute such embedded portions in such Object form without complying with the conditions of Sections 4(a), 4(b) and 4(d) of the License.

In addition, if you combine or link compiled forms of this Software with software that is licensed under the GPLv2 ("Combined Software") and if a court of competent jurisdiction determines that the patent provision (Section 3), the indemnity provision (Section 9) or other

Section of the License

conflicts with the conditions of the GPLv2, you may retroactively and prospectively choose to deem waived or otherwise exclude such Section(s) of the License, but only in their entirety and only with respect to the Combined Software.

1.27 appcompat 1.6.0

1.27.1 Available under license :

No license file was found, but licenses were detected in source scan.

```
/*
 * Copyright (C) 2020 AlexMofer
 *
 * Licensed under the Apache License, Version 2.0 (the "License");
 * you may not use this file except in compliance with the License.
 * You may obtain a copy of the License at
 *
 * http://www.apache.org/licenses/LICENSE-2.0
 *
 * Unless required by applicable law or agreed to in writing, software
 * distributed under the License is distributed on an "AS IS" BASIS,
 * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
 * See the License for the specific language governing permissions and
 * limitations under the License.
 */
```

Found in path(s):

```
* /opt/cola/permits/1549830853_1675235102.9042222/0/appcompat-1-6-0-sources-
jar/com/am/appcompat/app/Fragment.java
* /opt/cola/permits/1549830853_1675235102.9042222/0/appcompat-1-6-0-sources-
jar/com/am/appcompat/app/ApplicationHolder.java
* /opt/cola/permits/1549830853_1675235102.9042222/0/appcompat-1-6-0-sources-
jar/com/am/appcompat/app/AppCompatDialogFragment.java
*
```

/opt/cola/permits/1549830853_1675235102.9042222/0/appcompat-1-6-0-sources-jar/com/am/appcompat/app/AppCompatAlertDialogFragment.java
* /opt/cola/permits/1549830853_1675235102.9042222/0/appcompat-1-6-0-sources-jar/com/am/appcompat/app/AppCompatActivity.java
No license file was found, but licenses were detected in source scan.

/*
* Copyright (C) 2022 AlexMofer
*
* Licensed under the Apache License, Version 2.0 (the "License");
* you may not use this file except in compliance with the License.
* You may obtain a copy of the License at
*
* <http://www.apache.org/licenses/LICENSE-2.0>
*
* Unless required by applicable law or agreed to in writing, software
* distributed under the License is distributed on an "AS IS" BASIS,
* WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
* See the License for the specific language governing permissions and
* limitations under the License.
*/

Found in path(s):

* /opt/cola/permits/1549830853_1675235102.9042222/0/appcompat-1-6-0-sources-jar/com/am/appcompat/view/ToggleView.java
* /opt/cola/permits/1549830853_1675235102.9042222/0/appcompat-1-6-0-sources-jar/com/am/appcompat/dialog/MaterialAlertDialog.java
* /opt/cola/permits/1549830853_1675235102.9042222/0/appcompat-1-6-0-sources-jar/com/am/appcompat/view/FloatingActionMode.java
*
* /opt/cola/permits/1549830853_1675235102.9042222/0/appcompat-1-6-0-sources-jar/com/am/appcompat/view/OverflowListView.java
* /opt/cola/permits/1549830853_1675235102.9042222/0/appcompat-1-6-0-sources-jar/com/am/appcompat/dialog/MaterialDialogFragment.java
* /opt/cola/permits/1549830853_1675235102.9042222/0/appcompat-1-6-0-sources-jar/com/am/appcompat/widget/ShapeableImageView.java
* /opt/cola/permits/1549830853_1675235102.9042222/0/appcompat-1-6-0-sources-jar/com/am/appcompat/app/PendingIntentCompat.java
* /opt/cola/permits/1549830853_1675235102.9042222/0/appcompat-1-6-0-sources-jar/com/am/appcompat/view/LayoutParams.java
* /opt/cola/permits/1549830853_1675235102.9042222/0/appcompat-1-6-0-sources-jar/com/am/appcompat/dialog/MaterialDialog.java
* /opt/cola/permits/1549830853_1675235102.9042222/0/appcompat-1-6-0-sources-jar/com/am/appcompat/app/ToolbarDelegate.java
* /opt/cola/permits/1549830853_1675235102.9042222/0/appcompat-1-6-0-sources-jar/com/am/appcompat/storage/StorageManagerCompat.java
*

/opt/cola/permits/1549830853_1675235102.9042222/0/appcompat-1-6-0-sources-jar/com/am/appcompat/storage/StorageVolumeCompat.java
* /opt/cola/permits/1549830853_1675235102.9042222/0/appcompat-1-6-0-sources-jar/com/am/appcompat/view/ActionModeCompat.java
* /opt/cola/permits/1549830853_1675235102.9042222/0/appcompat-1-6-0-sources-jar/com/am/appcompat/graphics/CanvasCompat.java
* /opt/cola/permits/1549830853_1675235102.9042222/0/appcompat-1-6-0-sources-jar/com/am/appcompat/os/BundleCompat.java
* /opt/cola/permits/1549830853_1675235102.9042222/0/appcompat-1-6-0-sources-jar/com/am/appcompat/widget/AppCompatActivity.java
* /opt/cola/permits/1549830853_1675235102.9042222/0/appcompat-1-6-0-sources-jar/com/am/appcompat/dialog/MaterialDialogHelper.java
* /opt/cola/permits/1549830853_1675235102.9042222/0/appcompat-1-6-0-sources-jar/com/am/appcompat/widget/DividerItemDecoration.java
* /opt/cola/permits/1549830853_1675235102.9042222/0/appcompat-1-6-0-sources-jar/com/am/appcompat/view/MenuListView.java
*
/opt/cola/permits/1549830853_1675235102.9042222/0/appcompat-1-6-0-sources-jar/com/am/appcompat/view/MainLayout.java
* /opt/cola/permits/1549830853_1675235102.9042222/0/appcompat-1-6-0-sources-jar/com/am/appcompat/dialog/MaterialAlertDialogFragment.java
* /opt/cola/permits/1549830853_1675235102.9042222/0/appcompat-1-6-0-sources-jar/com/am/appcompat/view/MenuItemView.java
* /opt/cola/permits/1549830853_1675235102.9042222/0/appcompat-1-6-0-sources-jar/com/am/appcompat/widget/ImageViewHelper.java
* /opt/cola/permits/1549830853_1675235102.9042222/0/appcompat-1-6-0-sources-jar/com/am/appcompat/app/BackPressedDelegate.java
* /opt/cola/permits/1549830853_1675235102.9042222/0/appcompat-1-6-0-sources-jar/com/am/appcompat/app/ApplicationCompat.java
* /opt/cola/permits/1549830853_1675235102.9042222/0/appcompat-1-6-0-sources-jar/com/am/appcompat/widget/AppCompatActivity.java
* /opt/cola/permits/1549830853_1675235102.9042222/0/appcompat-1-6-0-sources-jar/com/am/appcompat/view/ToggleLayout.java
*
/opt/cola/permits/1549830853_1675235102.9042222/0/appcompat-1-6-0-sources-jar/com/am/appcompat/view/FloatingPopupWindow.java
* /opt/cola/permits/1549830853_1675235102.9042222/0/appcompat-1-6-0-sources-jar/com/am/appcompat/view/BoundsAdapter.java
* /opt/cola/permits/1549830853_1675235102.9042222/0/appcompat-1-6-0-sources-jar/com/am/appcompat/view/BackgroundLayout.java

1.28 gson 2.10.1

1.28.1 Available under license :

No license file was found, but licenses were detected in source scan.

Manifest-Version: 1.0

Created-By: 11.0.16.1 (Azul Systems, Inc.)
Build-Jdk-Spec: 11
Bnd-LastModified: 1673019830620
Bundle-ContactAddress: <https://github.com/google/gson>
Bundle-Description: Gson JSON library
Bundle-Developers: google;organization=Google;organizationUrl="https://www.google.com"
Bundle-DocURL: <https://github.com/google/gson/gson>
Bundle-License: "Apache-2.0";link="https://www.apache.org/licenses/LICENSE-2.0.txt"
Bundle-ManifestVersion: 2
Bundle-Name: Gson
Bundle-RequiredExecutionEnvironment: JavaSE-1.7, JavaSE-1.8
Bundle-SCM: url="https://github.com/google/gson/gson/",connection="scm:git:https://github.com/google/gson.git/gson",developer-connection="scm:git:git@github.com:google/gson.git/gson",tag="gson-parent-2.10.1"
Bundle-SymbolicName: com.google.gson
Bundle-Vendor: Google Gson Project
Bundle-Version: 2.10.1
Export-Package: com.google.gson;uses:="com.google.gson.reflect,com.google.gson.stream";version="2.10.1",com.google.gson.annotations;version="2.10.1",com.google.gson.reflect;version="2.10.1",com.google.gson.stream;version="2.10.1"
Import-Package: sun.misc;resolution:=optional,com.google.gson.annotations
Require-Capability: osgi.ee;filter="(&(osgi.ee=JavaSE)(version=1.7))"
Tool: Bnd-6.4.0.202211291949
Multi-Release: true

Found in path(s):

* /opt/cola/permits/1570533427_1676891842.8285189/0/gson-2-10-1-jar/META-INF/MANIFEST.MF

1.29 okhttp 4.11.0

1.29.1 Available under license :

Note that publicsuffixes.gz is compiled from The Public Suffix List:

https://publicsuffix.org/list/public_suffix_list.dat

It is subject to the terms of the Mozilla Public License, v. 2.0:

<https://mozilla.org/MPL/2.0/>

1.30 sqlite 3.42.0

1.30.1 Available under license :

MIT License

Copyright (c) 2021 Anton Zhiyanov

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

1.31openh264 3.35.0

1.31.1 Available under license :

Copyright (c) 2013, Cisco Systems

All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

* Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.

* Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT HOLDER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS

OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

Contributors to the OpenH264 project

Patrick Ai
Sijia Chen
ZhaoZheng Chu
Paley Du
Martin Ettl
Andreas Gal
Xu Guang
Licai Guo
Yi Guo
Horace Huang
Steven Huang
Ethan Hugg
Cullen Jennings
Zhaofeng Jia
Derrick Jin
Jesse Li
Jifei Li
Kai Li
Karina Li
Matt Li
Xiang Li
Bourne Ling
Alex Liu
Wayne Liu
Varun Patil
Eric Rescorla
Adam Roach
Sawyer Shan
Siping Tao
Martin Storsj
Brion Vibber
James Wang
Juanny Wang
Zhiliang Wang
Herv Willems
Gregory J Wolfe
Katherine Wu
Guang Xu
Jeffery Xu
Gang Yang
Li Yao
Jiessie Zhang

Rory Zhang
Volvvet Zhang
Ling Zhu
James Zhu
Dong Zhang
Haibo Zhu
Huade Shi

1.32 firebase-messaging 31.4.0

1.32.1 Available under license :

nav_order: 1

permalink: /

Contributor documentation

This site is a collection of docs and best practices for contributors to Firebase Android SDKs.

It describes how Firebase works on Android and provides guidance on how to build/maintain a Firebase SDK.

New to Firebase?

- [Development Environment Setup]({{ site.baseurl }}{% link onboarding/env_setup.md %})

- [Creating a new SDK]({{ site.baseurl }}{% link onboarding/new_sdk.md %})

- [How Firebase works]({{ site.baseurl }}{% link how_firebase_works.md %})

has_children: true

permalink: /best_practices/

nav_order: 5

Best Practices

parent: Best Practices

Dependency Injection

While [Firebase Components]({{ site.baseurl }}{% link components/components.md %}) provides basic Dependency Injection capabilities for interop between Firebase SDKs, it's not ideal as a general purpose DI framework for a few reasons, to name some:

* It's verbose, i.e. requires manually specifying dependencies and constructing instances of components in Component definitions.

* It has a runtime cost, i.e. initialization time is linear in the number of Components present in the graph

As a result using [Firebase Components]({{ site.baseurl }}{% link components/components.md %}) is appropriate only for inter-SDK injection and scoping instances per `FirebaseApp`.

On the other hand, manually instantiating SDKs is often tedious, errorprone, and leads to code smells that make code less testable and couples it to the implementation rather than the interface. For more context see [Dependency Injection](https://en.wikipedia.org/wiki/Dependency_injection) and [Motivation](https://github.com/google/guice/wiki/Motivation).

{: .important }

It's recommended to use [Dagger](https://dagger.dev) for internal dependency injection within the SDKs and [Components]({{ site.baseurl }}{% link components/components.md %}) to inject inter-sdk dependencies that are available only at runtime into the [Dagger Graph](https://dagger.dev/dev-guide/#building-the-graph) via [builder setters](https://dagger.dev/dev-guide/#binding-instances) or [factory arguments](https://dagger.dev/api/latest/dagger/Component.Factory.html).

See: [Dagger docs](https://dagger.dev)

See: [Dagger tutorial](https://dagger.dev/tutorial/)

{: .highlight }

While Hilt is the recommended way to use dagger in Android applications, it's not suitable for SDK/library development.

How to get started

Since [Dagger](https://dagger.dev) does not strictly follow semver and requires the dagger-compiler version to match the dagger library version,

it's not safe to depend

on it via a pom level dependency, see [This comment](https://github.com/firebase/firebase-android-sdk/issues/1677#issuecomment-645669608) for context. For this reason in Firebase SDKs we "vendor/repackage"

Dagger into the SDK itself under

`com.google.firebase.{sdkname}.dagger`. While it incurs in a size increase, it's usually on the order of a couple of KB and is considered negligible.

To use Dagger in your SDK use the following in your Gradle build file:

```
```groovy
plugins {
 id("firebase-vendor")
}

dependencies {
 implementation(libs.javax.inject)
 vendor(libs.dagger.dagger) {
 exclude group: "javax.inject", module: "javax.inject"
 }
}
```

```

 }
 annotationProcessor(libs.dagger.compiler)
 }
 ...

```

### ## General Dagger setup

As mentioned in [Firebase Components]({{ site.baseurl }}{% link components/components.md %}), all components are scoped per `FirebaseApp` meaning there is a single instance of the component within a given `FirebaseApp`.

This makes it a natural fit to get all inter-sdk dependencies and instantiate the Dagger component inside the `ComponentRegistrar`.

```

```kotlin
class MyRegistrar : ComponentRegistrar {
  override fun getComponents() = listOf(
    Component.builder(MySdk::class.java)
      .add(Dependency.required(FirebaseOptions::class.java))
      .add(Dependency.optionalProvider(SomeInteropDep::class.java))
      .factory(c -> DaggerMySdkComponent.builder()
        .setFirebaseApp(c.get(FirebaseApp::class.java))
        .setSomeInterop(c.getProvider(SomeInteropDep::class.java))
        .build()
        .getMySdk())
      .build()
  )
}
```

```

Here's a simple way to define the dagger component:

```

```kotlin
@Component(modules = MySdkComponent.MainModule::class)
@Singleton
interface MySdkComponent {
  // Informs dagger that this is one of the types we want to be able to create
  // In this example we only care about MySdk
  fun getMySdk() : MySdk

  // Tells Dagger that some types are not available statically and in order to create the component
  // it needs FirebaseApp and Provider<SomeInteropDep>
  @Component.Builder
  interface Builder {
    @BindsInstance fun setFirebaseApp(app: FirebaseApp)
    @BindsInstance fun setSomeInterop(interop: com.google.firebase.inject.Provider<SomeInteropDep>)
    fun build() : MySdkComponent
  }
}
```

```

```

@Module
interface MainModule {
 // define module @Provides and @Binds here
}
}
...

```

The only thing left to do is to properly annotate `MySdk`:

```

```kotlin
@Singleton
class MySdk @Inject constructor(app: FirebaseApp, interopAdapter: MySdkAdapter) {
    fun someMethod() {
        interopAdapter.doInterop()
    }
}

```

```

@Singleton
class MySdkInteropAdapter @Inject constructor(private val interop:
com.google.firebase.inject.Provider<SomeInteropDep>) {
    fun doInterop() {
        interop.get().doStuff()
    }
}
...

```

Scope

Unlike Component, Dagger does not use singleton scope by default and instead injects a new instance of a type at each injection point,

in the example above we want `MySdk` and

`MySdkInteropAdapter` to be singletons so they are annotated with `@Singleton`.

See [Scoped bindings](https://dagger.dev/dev-guide/#singletons-and-scoped-bindings) for more details.

Support multiple instances of the SDK per `FirebaseApp` (multi-resource)

As mentioned in [Firebase Components]({{ site.baseurl }}{% link components/components.md %}), some SDKs support multi-resource mode,

which effectively means that there are 2 scopes at play:

1. `@Singleton` scope that the main `MultiResourceComponent` has.
2. Each instance of the sdk will have its own scope.

```

```mermaid
flowchart LR
subgraph FirebaseApp
direction TB

```



```

subgraph FirebaseComponents
 direction BT
 subgraph GlobalComponents[Outside of SDK]
 direction LR

 FirebaseOptions
 SomeInterop
 Executor["@Background Executor"]
 end

 subgraph DatabaseComponent["@Singleton DatabaseMultiDb"]
 direction TB
 subgraph Singleton["@Singleton"]

SomeImpl --> SomeInterop
 SomeImpl --> Executor
 end

 subgraph Default["@DbScope SDK(default)"]
 MainClassDefault[FirebaseDatabase] --> SomeImpl
 SomeOtherImplDefault[SomeOtherImpl] --> FirebaseOptions
 MainClassDefault --> SomeOtherImplDefault
 end

 subgraph MyDbName["@DbScope SDK(myDbName)"]
 MainClassMyDbName[FirebaseDatabase] --> SomeImpl
 SomeOtherImplMyDbName[SomeOtherImpl] --> FirebaseOptions
 MainClassMyDbName --> SomeOtherImplMyDbName
 end
 end
end

classDef green fill:#4db6ac
classDef blue fill:#1a73e8
class GlobalComponents green
class DatabaseComponent green
class Default blue
class MyDbName blue
```

```

As you can see above, `DatabaseMultiDb` and `SomeImpl` are singletons, while `FirebaseDatabase` and `SomeOtherImpl` are scoped per `database name`.

It can be easily achieved with the help of [Dagger's subcomponents](https://dagger.dev/dev-guide/subcomponents).

For
example:

```

```kotlin
@Scope
annotation class DbScope

@Component(modules = DatabaseComponent.MainModule::class)
interface DatabaseComponent {
 fun getMultiDb() : DatabaseMultiDb

 @Component.Builder
 interface Builder {
 // usual setters for Firebase component dependencies
 // ...
 fun build() : DatabaseComponent
 }

 @Module(subcomponents = DbInstanceComponent::class)
 interface MainModule {}

 @Subcomponent(modules = DbInstanceComponent.InstanceModule::class)
 @DbScope
 interface DbInstanceComponent {
 fun factory() : Factory

 @Subcomponent.Factory
 interface Factory {
 fun create(@BindsInstance @Named("dbName") dbName: String)
 }
 }

 @Module
 interface InstanceModule {
 // ...
 }
}
```

```

Annotating `FirebaseDatabase`:

```

```kotlin
@DbScope
class FirebaseDatabase @Inject constructor(options: FirebaseOptions, @Named dbName: String) {
 // ...
}
```

```

Implementing
`DatabaseMultiDb`:

```

```kotlin
@Singleton
class DatabaseMultiDb @Inject constructor(private val factory: DbInstanceComponent.Factory) {
 private val instances = mutableMapOf<String, FirebaseDatabase>()

 @Synchronized
 fun get(dbName: String) : FirebaseDatabase {
 if (!instances.containsKey(dbName)) {
 mInstances.put(dbName, factory.create(dbName))
 }
 return mInstances.get(dbName);
 }
}
```

```

parent: Onboarding

Creating a new Firebase SDK

```
{: .no_toc}
```

1. TOC

```
{:toc}
```

Want to create a new SDK in

[firebase/firebase-android-sdk](https://github.com/firebase/firebase-android-sdk)?

Read on.

```
{:toc}
```

Repository layout and Gradle

[firebase/firebase-android-sdk](https://github.com/firebase/firebase-android-sdk)

uses a multi-project Gradle build to organize the different libraries it hosts.

As a consequence, each project/product within this repo is hosted under its own subdirectory with its respective build file(s).

```
```bash
```

```
firebase-android-sdk
```

```
buildSrc
```

```
appcheck
```

```
 firebase-appcheck
```

```
 firebase-appcheck-playintegrity
```

```
firebase-annotations
```

```
firebase-common
```

```
 firebase-common.gradle # note the name of the build file
```

```
 ktx
```

```
 ktx.gradle.kts # it can also be kts
```

build.gradle # root project build file.

...

Most commonly, SDKs are located as immediate child directories of the root directory, with the directory name being the exact name of the Maven artifact ID the

library will have once released. e.g. `firebase-common` directory hosts code for the `com.google.firebase:firebase-common` SDK.

```
{: .warning }
```

Note that the build file name for any given SDK is not `build.gradle` or `build.gradle.kts` but rather mirrors the name of the sdk, e.g.

```
`firebase-common/firebase-common.gradle` or `firebase-common/firebase-common.gradle.kts`.
```

All of the core Gradle build logic lives in `buildSrc` and is used by all SDKs.

SDKs can be grouped together for convenience by placing them in a directory of choice.

### ## Creating an SDK

Let's say you want to create an SDK named `firebase-foo`

1. Create a directory called `firebase-foo`.
1. Create a file `firebase-foo/firebase-foo.gradle.kts`.
1. Add `firebase-foo` line to `subprojects.cfg` at the root of the tree.

### Update `firebase-foo.gradle.kts` with the following content

```
<details open markdown="block">
```

```
<summary>
```

```
 firebase-foo.gradle.kts
```

```
</summary>
```

```
```kotlin
```

```
plugins {
```

```
    id("firebase-library")
```

```
    // Uncomment
```

```
    for Kotlin
```

```
    // id("kotlin-android")
```

```
}
```

```
firebaseLibrary {
```

```
    // enable this only if you have tests in `androidTest`.
```

```
    testLab.enabled = true
```

```
    publishSources = true
```

```
    publishJavadoc = true
```

```
}
```

```

android {
    val targetSdkVersion : Int by rootProject
    val minSdkVersion : Int by rootProject

    compileSdk = targetSdkVersion
    defaultConfig {
        namespace = "com.google.firebase.foo"
        // change this if you have custom needs.
        minSdk = minSdkVersion
        targetSdk = targetSdkVersion
        testInstrumentationRunner = "androidx.test.runner.AndroidJUnitRunner"
    }

    testOptions.unitTests.isIncludeAndroidResources = true
}

dependencies {
    implementation(project(":firebase-common"))
    implementation(project(":firebase-components"))
}

...
</details>

```

Create `src/main/AndroidManifest.xml` with the following content:

```

<details open markdown="block">
    <summary>
        src/main/AndroidManifest.xml
    </summary>
    ```xml
 <?xml version="1.0" encoding="utf-8"?>
 <!-- Copyright {{ 'now' |
 date: "%Y" }} Google LLC -->
 <!-- -->
 <!-- Licensed under the Apache License, Version 2.0 (the "License"); -->
 <!-- you may not use this file except in compliance with the License. -->
 <!-- You may obtain a copy of the License at -->
 <!-- -->
 <!-- http://www.apache.org/licenses/LICENSE-2.0 -->
 <!-- -->
 <!-- Unless required by applicable law or agreed to in writing, software -->
 <!-- distributed under the License is distributed on an "AS IS" BASIS, -->
 <!-- WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. -->
 <!-- See the License for the specific language governing permissions and -->
 <!-- limitations under the License. -->

```

```

<manifest xmlns:android="http://schemas.android.com/apk/res/android">
 <application>
 <service android:name="com.google.firebase.components.ComponentDiscoveryService"
 android:exported="false">
 <meta-data
 android:name="com.google.firebase.components:com.google.firebase.foo.FirebaseFooRegistrar"

 android:value="com.google.firebase.components.ComponentRegistrar" />
 </service>
 </application>
 </manifest>
 ...

```

</details>

### Create `com.google.firebase.foo.FirebaseFoo`

For Kotlin

```

<details open markdown="block">
 <summary>
 src/main/kotlin/com/google/firebase/foo/FirebaseFoo.kt
 </summary>

```

```

```kotlin

```

```

class FirebaseFoo {
  companion object {
    @JvmStatic
    val instance: FirebaseFoo
    get() = getInstance(Firebase.app)

    @JvmStatic fun getInstance(app: FirebaseApp): FirebaseFoo = app.get(FirebaseFoo::class.java)
  }
}
...

```

</details>

For Java

```

<details markdown="block">
  <summary>
    src/main/java/com/google/firebase/foo/FirebaseFoo.java
  </summary>

```

```

```java

```

```

public class FirebaseFoo {
 public static FirebaseFoo getInstance() {
 return getInstance(FirebaseApp.getInstance());
 }
}

```

```

public static FirebaseFoo getInstance(FirebaseApp app) {
 return app.get(FirebaseFoo.class);
}
}
...

```

</details>

### Create `com.google.firebase.foo.FirebaseFooRegistrar`

For

Kotlin

<details open markdown="block">

<summary>

src/main/kotlin/com/google/firebase/foo/FirebaseFooRegistrar.kt

</summary>

{: .warning }

You should strongly consider using [Dependency Injection]({{ site.baseurl }}{% link best\_practices/dependency\_injection.md %})

to instantiate your sdk instead of manually constructing its instance in the `factory()` below.

```

```kotlin

```

```

class FirebaseFooRegistrar : ComponentRegistrar {
    override fun getComponents() =
        listOf(
            Component.builder(FirebaseFoo::class.java).factory { container -> FirebaseFoo() }.build(),
            LibraryVersionComponent.create("fire-foo", BuildConfig.VERSION_NAME)
        )
}
...

```

</details>

For Java

<details markdown="block">

<summary>

src/main/java/com/google/firebase/foo/FirebaseFooRegistrar.java

</summary>

```

```java

```

```

public class FirebaseFooRegistrar implements ComponentRegistrar {
 @Override
 public List<Component<?>> getComponents() {
 return Arrays.asList(
 Component.builder(FirebaseFoo.class).factory(c
-> new FirebaseFoo()).build(),
 LibraryVersionComponent.create("fire-foo", BuildConfig.VERSION_NAME));
}
}

```

```
}
}
...
```

</details>

Continue to [How Firebase works]({{ site.baseurl }}{% link how\_firebase\_works.md %}).

Test license

---

has\_children: true

permalink: /components/

nav\_order: 4

---

# Firebase Components

{: .no\_toc}

1. TOC

{:toc}

Firebase is known for being easy to use and requiring no/minimal configuration at runtime.

Just adding SDKs to the app makes them discover each other to provide additional functionality, e.g. `Firestore` automatically integrates with `Auth` if present in the app.

\* Firebase SDKs have required and optional dependencies on other Firebase SDKs

\* SDKs have different initialization requirements, e.g. `Analytics` and `Crashlytics` must be initialized upon application startup, while some are initialized on demand only.

To accommodate these requirements Firebase uses a component model that discovers SDKs present in the app, determines their dependencies and provides them to dependent SDKs via a `Dependency Injection` mechanism.

This page describes the aforementioned Component Model, how it works and why it's needed.

## Design Considerations

### Transparent/invisible to 3p Developers

To

provide good developer experience, we don't want developers to think about how SDKs work and interoperate internally.

Instead we want our SDKs to have a simple API surface that hides all of the internal details.

Most products have an API surface that allows developers to get an instance of a given SDK via

`FirebaseFoo.getInstance()`

and start using it right away.

### Simple to use and integrate with for component developers



- \* The component model is lightweight in terms of integration effort. It is not opinionated on how components are structured.
- \* The component model should require as little cooperation from components runtime as possible.
- \* It provides component developers with an API that is easy to use correctly, and hard to use incorrectly.
- \* Does not sacrifice testability of individual components in isolation

### Performant at startup and initialization

The runtime does as little work as possible during initialization.

## What is a Component?

A Firebase Component  
is an entity that:

- \* Implements one or more interfaces
- \* Has a list of dependencies(required or optional). See [Dependencies]({{ site.baseurl }}{% link components/dependencies.md %})
- \* Has initialization requirements(e.g. eager in default app)
- \* Defines a factory creates an instance of the components interface given it's dependencies.  
(In other words describes how to create the given component.)

Example:

```
```java
// Defines a component that is registered as both `FirebaseAuth` and `InternalAuthProvider`.
Component<FirebaseAuth> auth = Component.builder(FirebaseAuth.class, InternalAuthProvider.class)
    // Declares dependencies
    .add(Dependency.required(FirebaseOptions.class))
    // Defines a factory
    .factory(container -> new FirebaseAuth(container.get(FirebaseOptions.class)))
    .eagerInDefaultApp() // alwaysEager() or lazy(), lazy is the default.
    .build()
```
```

All components are singletons within a Component Container(e.g. one instance per FirebaseAuth).

There are however

SDKs that need the ability to expose multiple objects per FirebaseAuth, for example RTBD(as well as Storage and Firestore) has multodb support which allows developers to access one or more databases within one FirebaseAuth. To address this requirement, SDKs have to register their components in the following form(or similar):

```
```java
// This is the singleton holder of different instances of FirebaseDatabase.
interface RtdbComponent {
    FirebaseDatabase getDefault();
    FirebaseDatabase get(String databaseName);
}
```
```

...

As you can see in the previous section, components are just values and don't have any behavior per se, essentially they are just blueprints of how to create them and what dependencies they need.

So there needs to be some `ComponentRuntime` that can discover and wire them together into a dependency graph, in order to do that, there needs to be an agreed upon location where SDKs can register the components they provide.

The next 2 sections describe how it's done.

## ## Component Registration

In order to define the `Components` an SDK provides, it needs to define a class that implements `ComponentRegistrar`, this class contains all component definitions the SDK wants to register with the runtime:

```
```java
public class MyRegistrar implements ComponentRegistrar {
    /// Returns a one or more Components that will be registered in
    /// FirebaseAuth and participate in dependency resolution and injection.
    @Override
    public Collection<FirebaseComponent<?>> getComponents() {
        Arrays.asList(Component.builder(MyType.class)
            /* ... */
            .build());
    }
}
```
```

## ## Component Discovery

In addition to creating the `ComponentRegistrar` class, SDKs also need to add them to their `AndroidManifest.xml` under `ComponentDiscoveryService`:

```
```xml
<manifest xmlns:android="http://schemas.android.com/apk/res/android">
    <application>
        <service android:name="com.google.firebase.components.ComponentDiscoveryService"
            android:exported="false">

            <meta-data
                android:name="com.google.firebase.components:com.google.firebase.foo.FirebaseFooRegistrar"
                android:value="com.google.firebase.components.ComponentRegistrar" />
        </service>
    </application>
</manifest>
```
```

When the final app is built, manifest registrar entries will all end up inside the above `service` as metadata key-value pairs.

At this point `FirebaseApp` will instantiate them and use the `ComponentRuntime` to construct the component graph.

## Dependency resolution and initialization

### Definitions and constraints

\* \*\*Component A depends on Component B\*\* if `B` depends on an `interface` that `A` implements.

\* \*\*For any Interface I, only one component is allowed to implement I\*\* (with the exception of [Set Dependencies]({{ site.baseurl }}{% link components/dependencies.md %}#set-dependencies)). If this invariant is violated, the container will fail to start at runtime.

\* \*\*There must not be any dependency cycles\*\* among components.

See Dependency Cycle Resolution on how this limitation can be mitigated

\* \*\*Components are initialized lazily by default\*\* (unless a component is declared eager) and are initialized when requested by an application either directly or transitively.

The initialization phase of the FirebaseApp will consist of the following steps:

1. Get a list of available FirebaseComponents that were discovered by the Discovery mechanism
2. Topologically sort components based on their declared dependencies - failing if a dependency cycle is detected or multiple implementations are registered for any interface.
3. Store a map of {iface -> ComponentFactory} so that components can be instantiated on demand (Note that component instantiation does not yet happen)
4. Initialize EAGER components or schedule them to initialize on device unlock, if in direct boot mode.

### Initialization example

Below is an example illustration of the state of the component graph after initialization:

```
```mermaid
flowchart
  TD
    Analytics --> Installations
    Auth --> Context
    Auth --> FirebaseOptions
    Context[android.os.Context]
    Crashlytics --> Installations
    Crashlytics --> FirebaseApp
    Crashlytics --> FirebaseOptions
    Crashlytics -. -> Analytics
    Crashlytics --> Context
    Database -. -> Auth
```

Database --> Context
Database --> FirebaseApp
Database --> FirebaseOptions
Firestore --> Auth
Messaging --> Installations
Messaging --> FirebaseOptions
Messaging --> Context
RemoteConfig --> FirebaseApp
RemoteConfig --> Context
RemoteConfig --> Installations

```
classDef eager fill:#4db66e,stroke:#4db6ac,color:#000;  
classDef transitive fill:#4db6ac,stroke:#4db6ac,color:#000;  
classDef always fill:#1a73e8,stroke:#7baaf7,color:#fff;
```

```
class Analytics eager  
class Crashlytics eager  
class Context always  
class FirebaseOptions always  
class FirebaseApp always  
class Installations transitive  
...
```

There are **2**

explicitly **eager** components in this example: `Crashlytics`` and `Analytics``.

These components are initialized when `FirebaseApp`` is initialized. `Installations`` is initialized eagerly because `eager` components depends on it(see Prefer Lazy dependencies to avoid this as much as possible).

`FirebaseApp``, `FirebaseOptions`` and `Android Context`` are always present in the Component Container and are considered initialized as well.

**The rest of the components are left uninitialized and will remain so until the client application requests them or an eager*

*component initializes them by using a Lazy dependency.**

For example, if the application calls `FirebaseDatabase.getInstance()`, the container will initialize `Auth`` and `Database``

and will return `Database`` to the user.

Support multiple instances of the SDK per `FirebaseApp``(multi-resource)

Some SDKs support multi-resource mode of operation, where it's possible to create more than one instance per `FirebaseApp``.

Examples:

* RTDB allows

more than one database in a single Firebase project, so it's possible to instantiate one instance of the sdk per database

```
```kotlin
val rtDbOne = Firebase.database(app) // uses default database
val rtDbTwo = Firebase.database(app, "dbName")
```
```

* Firestore, functions, and others support the same usage pattern

To allow for that, such SDKs register a singleton "MultiResource" [Firebase component]({{ site.baseurl }}{% link components/components.md %}), which creates instances per resource(e.g. db name).

Example

```
```kotlin
class DatabaseComponent(private val app: FirebaseApp, private val tokenProvider: InternalTokenProvider) {
 private val instances: MutableMap<String, FirebaseDatabase> = new HashMap<>();
```

```
 @Synchronized
 fun get(dbName: String) : FirebaseDatabase {
 if (!instances.containsKey(dbName)) {
 instances.put(dbName, FirebaseDatabase(app, tokenProvider, dbName))
 }
 return instances.get(dbName);
 }
}
```

```
class FirebaseDatabase(
 app: FirebaseApp,
 tokenProvider:
 InternalTokenProvider,
 private val String dbName)
```

```
 companion object {
 fun getInstance(app : FirebaseApp) = getInstance("default")
 fun getInstance(app : FirebaseApp, dbName: String) =
 app.get(DatabaseComponent::class.java).get("default")
 }
}
```

```
```
```

title: Contributor documentation

description: Documentation and best practices for Android SDK development

logo: "https://firebase.google.com/downloads/brand-guidelines/SVG/logo-logomark.svg"

remote_theme: just-the-docs/just-the-docs@v0.4.0.rc3

plugins:

- jekyll-remote-theme

color_scheme: light

```
# Aux links for the upper right navigation
aux_links:
  "SDK Github Repo":
    - "//github.com/firebase/firebase-android-sdk"

# Enable or disable the site search
# Supports true (default) or false
search_enabled: true
search:
  # Split pages into sections that can be searched individually
  # Supports 1 - 6, default: 2
  heading_level: 6
  # Maximum amount of previews per search result
  # Default: 3
  previews: 2
  # Maximum amount of words to display before a matched word in the preview
  # Default: 5
  preview_words_before: 3
  # Maximum amount of words to display after a matched word in the preview
  # Default: 10
  preview_words_after: 3
  # Set the search token separator
  # Default: /\s-/+
  # Example: enable support for hyphenated search words
  tokenizer_separator: /\s/+/
  # Display the relative url in search results
  # Supports true (default) or false
  rel_url: true
  # Enable or disable the search button that appears in the bottom right corner of every page
  # Supports true or false (default)
  button: false

mermaid:
  # Version of mermaid library
  # Pick an available version from https://cdn.jsdelivr.net/npm/mermaid/
  version: "9.2.2"
  # Put any additional configuration, such as setting the theme, in _includes/mermaid_config.js

# Enable or disable heading anchors
heading_anchors: true
permalink: pretty

callouts_level: quiet
callouts:
  highlight:
    color: yellow
  important:
```

```

title: Important
color: blue
new:
  title: New
  color: green
note:
  title: Note
  color: purple
warning:
  title: Warning
  color: red

# Back to top link
back_to_top: true
back_to_top_text: "Back to top"

# Footer last edited timestamp
last_edit_timestamp:
  true # show or hide edit time - page must have `last_modified_date` defined in the frontmatter
last_edit_time_format: "%b %e %Y at %I:%M %p" # uses ruby's time format: https://ruby-doc.org/stdlib-2.7.0/libdoc/time/rdoc/Time.html

# Footer "Edit this page on GitHub" link text
gh_edit_link: true # show or hide edit this page link
gh_edit_link_text: "Edit this page on GitHub"
gh_edit_repository: "https://github.com/firebase/firebase-android-sdk" # the github URL for your repo
gh_edit_branch: "master" # the branch that your docs is served from
gh_edit_source: "contributor-docs" # the source that your files originate from
gh_edit_view_mode: "edit" # "tree" or "edit" if you want the user to jump into the editor immediately
name: Copyright check

on: pull_request

concurrency:
  group: ${{ github.workflow }}-${{ github.event.pull_request.number || github.ref }}
  cancel-in-progress: true

jobs:
  copyright-check:
    runs-on: ubuntu-22.04
    steps:
      - uses: actions/checkout@v3.0.2
      - uses: actions/setup-python@v2
        with:
          python-version: '3.9'
      - run: |
          pip install -e "ci/fireci"

```

```
- run: |
  fireci copyright_check \
    -e py          \
    -e gradle      \
    -e java        \
    -e kt          \
    -e groovy      \
    -e sh          \
    -e proto
```

parent: Firebase Components

Dynamic Module Support

TODO

parent: Firebase Components

Executors

{: .no_toc}

1. TOC

{:toc}

Intro

OS threads are a limited resource that needs to be used with care. In order to minimize the number of threads used by Firebase

as a whole and to increase resource sharing Firebase Common provides a set of standard

[executors](<https://developer.android.com/reference/java/util/concurrent/Executor>)

and [coroutine dispatchers](<https://kotlinlang.org/api/kotlinx.coroutines/kotlinx-coroutines-core/kotlinx.coroutines/-coroutine-dispatcher/>)

for use by all Firebase SDKs.

These executors are available as components and can be requested by product SDKs as component dependencies.

Example:

```
```java
```

```
public class MyRegistrar implements ComponentRegistrar {
```

```
 public List<Component<?>> getComponents() {
```

```
 Qualified<Executor> backgroundExecutor = Qualified.qualified(Background.class, Executor.class);
```

```
 Qualified<ExecutorService> liteExecutorService = Qualified.qualified(Lightweight.class, ExecutorService.class);
```

```
 return Collections.singletonList(
```

```
 Component.builder(MyComponent.class)
```



```

 .add(Dependency.required(backgroundExecutor))
 .add(Dependency.required(liteExecutorService))
 .factory(c -> new MyComponent(c.get(backgroundExecutor), c.get(liteExecutorService)))
 .build();
 }
}
...

```

All executors(with the exception of `@UiThread`) are available as the following interfaces:

```

* `Executor`
* `ExecutorService`
* `ScheduledExecutorService`
* `CoroutineDispatcher`

```

`@UiThread` is provided only as a plain `Executor`.

### ### Validation

All SDKs have a custom linter check that detects creation of thread pools and threads, this is to ensure SDKs use the above executors instead of creating their own.

### ## Choose the right executor

Use the following diagram to pick the right executor for the task you have at hand.

```

```mermaid
flowchart TD
    Start[Start] --> DoesBlock{Does it block?}
    DoesBlock -->|No| NeedUi{Does it need to run\n on UI thread?}
    NeedUi -->|Yes| UiExecutor[[UiThread Executor]]
    NeedUi -->|No| TakesLong{Does it take more than\n 10ms to execute?}
    TakesLong -->|No| LiteExecutor[[Lightweight Executor]]
    TakesLong -->|Yes| BgExecutor[[Background Executor]]
    DoesBlock -->|Yes| DiskIO{Does it block only\n on disk IO?}
    DiskIO -->|Yes| BgExecutor
    DiskIO -->|No| BlockExecutor[[Blocking Executor]]

```

```

classDef start fill:#4db6ac,stroke:#4db6ac,color:#000;
class Start start

```

```

classDef condition fill:#f8f9fa,stroke:#bdc1c6,color:#000;
class DoesBlock condition;
class NeedUi condition;
class TakesLong condition;
class DiskIO condition;

```

```
classDef executor fill:#1a73e8,stroke:#7baaf7,color:#fff;
class UiExecutor executor;
class LiteExecutor executor;
class BgExecutor executor;
class BlockExecutor executor;
...

```

UiThread

Used to schedule tasks on application's UI thread, internally it uses a Handler to post runnables onto the main looper.

Example:

```
```java
//
Java
Qualified<Executor> uiExecutor = qualifiedUiThread.class, Executor.class);
...

```

```
```kotlin
// Kotlin
Qualified<CoroutineDispatcher> dispatcher = qualifiedUiThread::class.java, CoroutineDispatcher::class.java);
...

```

Lightweight

Use for tasks that never block and don't take to long to execute. Backed by a thread pool of N threads where N is the amount of parallelism available on the device(number of CPU cores)

Example:

```
```java
// Java
Qualified<Executor> liteExecutor = qualifiedLightweight.class, Executor.class);
...

```

```
```kotlin
// Kotlin
Qualified<CoroutineDispatcher> dispatcher = qualifiedLightweight::class.java, CoroutineDispatcher::class.java);
...

```

Background

Use for tasks that may block on disk IO(use `@Blocking` for network IO or blocking on other threads). Backed by 4 threads.

Example:

```
```java
// Java
Qualified<Executor> bgExecutor = qualified(Background.class, Executor.class);
```
```

```
```kotlin
// Kotlin
Qualified<CoroutineDispatcher> dispatcher
= qualified(Background::class.java, CoroutineDispatcher::class.java);
```
```

Blocking

Use for tasks that can block for arbitrary amounts of time, this includes network IO.

Example:

```
```java
// Java
Qualified<Executor> blockingExecutor = qualified(Blocking.class, Executor.class);
```
```

```
```kotlin
// Kotlin
Qualified<CoroutineDispatcher> dispatcher = qualified(Blocking::class.java, CoroutineDispatcher::class.java);
```
```

Other executors

Direct executor

```
{: .warning }
```

Prefer `@Lightweight` instead of using direct executor as it could cause dead locks and stack overflows.

For any trivial tasks that don't need to run asynchronously

Example:

```
```kotlin
FirebaseExecutors.directExecutor()
```
```

Sequential Executor

When you need an executor that runs tasks sequentially and guarantees any memory access is synchronized prefer to use a sequential executor instead of creating a `newSingleThreadedExecutor()`.

Example:

```
```java
// Pick the appropriate underlying executor using the
// chart above
Qualified<Executor> bgExecutor = qualified(Background.class, Executor.class);
// ...
Executor sequentialExecutor = FirebaseExecutors.newSequentialExecutor(c.get(bgExecutor));
```
```

Proper Kotlin usage

A `CoroutineContext` should be preferred when possible over an explicit `Executor` or `CoroutineDispatcher`. You should only use an `Executor` at the highest (or inversely the lowest) level of your implementations. Most classes should not be concerned with the existence of an `Executor`.

Keep in mind that you can combine `CoroutineContext` with other `CoroutineScope` or `CoroutineContext`. And that all `suspend` functions inherit their `CoroutineContext`:

```
```kotlin
suspend fun createSession(): Session {
 val context = backgroundDispatcher.coroutineContext + coroutineContext
 return Session(context)
}
```
```

To learn more, you should give the following Kotlin wiki page a read:

[Coroutine context and dispatchers](<https://kotlinlang.org/docs/coroutine-context-and-dispatchers.html#dispatchers-and-threads>)

##

Testing

Using Executors in tests

`@Lightweight` and `@Background` executors have `StrictMode` enabled and throw exceptions on violations. For example trying to do Network IO on either of them will throw.

With that in mind, when it comes to writing tests, prefer to use the common executors as opposed to creating your own thread pools. This will ensure that your code uses the appropriate executor and does not slow down all of Firebase by using the wrong one.

To do that, you should prefer relying on Components to inject the right executor even in tests.

This will ensure your tests are always using the executor that is actually used in your SDK build.

If your SDK uses Dagger, see [Dependency Injection]({{ site.baseurl }}{% link best_practices/dependency_injection.md %})

and [Dagger's testing guide](https://dagger.dev/dev-guide/testing).

When the above is not an option, you can use `TestOnlyExecutors`, but make sure you're testing your code with the same executor that is used in production code:

```
```kotlin
dependencies {
 // ...
 testImplementation(project(":integ-testing"))
 // or
 androidTestImplementation(project(":integ-testing"))
}
```
```

This gives access to

```
```java
TestOnlyExecutors.ui();
TestOnlyExecutors.background();
TestOnlyExecutors.blocking();
TestOnlyExecutors.lite();
```
```

Policy violations in tests

Unit tests require [Robolectric](https://github.com/robolectric/robolectric) to function correctly, and this comes with a major drawback; no policy validation.

Robolectric supports `StrictMode` - but does not provide the backing for its policy mechanisms to fire on violations. As such, you'll be able to do things like using `TestOnlyExecutors.background()` to execute blocking actions; usage that would have otherwise crashed in a real application.

Unfortunately, there is no easy way to fix this for unit tests. You can get around the issue by moving the tests to an emulator (integration tests)- but those can

be more expensive than your standard unit test, so you may want to take that into consideration when planning your testing strategy.

StandardTestDispatcher support

The [kotlin.coroutines.test](https://kotlin.github.io/kotlinx.coroutines/kotlinx-coroutines-test/) library provides support for a number of different mechanisms in tests. Some of the more famous features include:

- [advanceUntilIdle](https://kotlin.github.io/kotlinx.coroutines/kotlinx-coroutines-test/kotlinx.coroutines.test/-test-coroutine-scheduler/advance-until-idle.html)

- [advanceTimeBy](https://kotlin.github.io/kotlinx.coroutines/kotlinx-coroutines-test/kotlinx.coroutines.test/-test-coroutine-scheduler/advance-time-by.html)
- [runCurrent](https://kotlin.github.io/kotlinx.coroutines/kotlinx-coroutines-test/kotlinx.coroutines.test/-test-coroutine-scheduler/run-current.html)

These features are all backed by `StandardTestDispatcher`, or more appropriately, the `TestScope` provided in a `runTest` block.

Unfortunately,

`TestOnlyExecutors` does not natively bind with `TestScope`.

Meaning, should you use `TestOnlyExecutors` in your tests- you won't be able to utilize the features provided by `TestScope`:

```
```kotlin
@Test
fun doesStuff() = runTest {
 val scope = CoroutineScope(TestOnlyExecutors.background().asCoroutineDispatcher())
 scope.launch {
 // ... does stuff
 }

 runCurrent() // doesn't invoke scope ??
}
```
```

To help fix this, we provide an extension method on `TestScope` called `firebaseExecutors`. It facilitates the binding of `TestOnlyExecutors` with the current `TestScope`.

For example, here's how you could use this extension method in a test:

```
```kotlin
@Test
fun doesStuff() = runTest {
 val scope = CoroutineScope(firebaseExecutors.background)
 scope.launch {
 // ... does stuff
 }

 runCurrent()
}
```
---
nav_order: 3
---
# How Firebase Works
```

Background

Eager Initialization

One of the biggest strengths for Firebase clients is the ease of integration. In a common case, a developer has very few things to do to integrate with Firebase. There is no need to initialize/configure Firebase at runtime. Firebase automatically initializes at application start and begins providing value to developers. A few notable examples:

- * `Analytics` automatically tracks app events
- * `Firebase Performance` automatically tracks app startup time, all network requests and screen performance
- * `Crashlytics` automatically captures all application crashes, ANRs and non-fatals

This feature makes onboarding and adoption very simple. However, comes with the great responsibility of keeping the application snappy. We shouldn't slow down application startup for 3p developers as it can stand in the way of user adoption of their application.

Automatic Inter-Product Discovery

When present together in an application, Firebase products can detect each other and automatically provide additional functionality to the developer, e.g.:

- * `Firestore` automatically detects `Auth` and `AppCheck` to protect read/write access to the database
- * `Crashlytics` integrates with `Analytics`, when available, to provide additional insights into the application behavior and enables safe app rollouts

FirebaseApp at the Core of Firebase

Regardless of what Firebase SDKs are present in the app, the main initialization point of Firebase is `FirebaseApp`. It acts as a container for all SDKs, manages their configuration, initialization and lifecycle.

Initialization

`FirebaseApp` gets initialized with the help of `FirebaseApp.initializeApp()`. This happens [automatically at app startup](<https://firebase.blog/posts/2016/12/how-does-firebase-initialize-on-android>) or manually by the developer.

During initialization, `FirebaseApp` discovers all Firebase SDKs present in the app, determines the dependency graph between products (for inter-product functionality) and initializes `eager` products that need to start immediately, e.g. `Crashlytics` and `FirebasePerformance`.

Firebase Configuration

`FirebaseApp` contains Firebase configuration for all products to use, namely `FirebaseOptions`, which tells Firebase which `Firebase` project to talk to, which real-time database to use, etc.

Additional Services/Components

In addition to `FirebaseOptions`, `FirebaseApp` registers additional components that product SDKs can request via

dependency injection. To name a few:

- * `android.content.Context` (Application context)
- * [Common Executors]({{ site.baseurl }}{% link components/executors.md %})
- * `FirebaseOptions`
- * Various internal components

Discovery and Dependency Injection

There are multiple considerations that lead to the current design of how Firebase SDKs initialize.

1. Certain SDKs need to initialize at app startup.
2. SDKs have optional dependencies on other products that get enabled when the developer adds the dependency to their app.

To enable this functionality, Firebase uses a runtime discovery and dependency injection framework [firebase-components](<https://github.com/firebase/firebase-android-sdk/tree/master/firebase-components>).

To integrate with this framework SDKs register the components they provide via a `ComponentRegistrar` and declare any dependencies they need to initialize, e.g.

```
```java
public class MyRegistrar implements ComponentRegistrar {
 @Override
 public List<Component<?>> getComponents() {
 return Arrays.asList(
 // declare the component
 Component.builder(MyComponent.class)
 // declare dependencies
 .add(Dependency.required(Context.class))
 .add(Dependency.required(FirebaseOptions.class))
 .add(Dependency.optionalProvider(InternalAuthProvider.class))
 // let the runtime know how to create your component.
 .factory(
 diContainer
->
 new MyComponent(
 diContainer.get(Context.class),
 diContainer.get(FirebaseOptions.class),
 diContainer.get(InternalAuthProvider.class)))
 .build());
 }
 }
}
```
```

This registrar is then registered in `AndroidManifest.xml` of the SDK and is used by `FirebaseApp` to discover all components and construct the dependency graph.

More details in [Firebase Components]({{ site.baseurl }}{% link components/components.md %}).

parent: Onboarding

Development Environment Setup

This page describes software and configuration required to work on code in the [Firebase/firebase-android-sdk](https://github.com/firebase/firebase-android-sdk) repository.

{:toc}

JDK

The currently required version of the JDK is `11`. Any other versions are unsupported and using them could result in build failures.

Android Studio

In general, the most recent version of Android Studio should work. The version that is tested at the time of this writing is `Dolphin | 2021.3.1`.

Download it here:

[Download Android Studio](https://developer.android.com/studio)

Emulators

If you plan to run tests on emulators (you should), you should be able to install them directly from Android Studio's AVD manager.

Github (Googlers Only)

To onboard and get write access to the github repository you need to have a github account fully linked with go/github.

File a bug using this

[bug template](http://b/issues/new?component=312729&template=1016566)

and wait

for access to be granted.

After that configure github keys as usual using this

[Github documentation page](https://docs.github.com/en/github/authenticating-to-github/connecting-to-github-with-ssh).

Importing the repository

1. Clone the repository with `git clone --recurse-submodules`

git@github.com:firebase/firebase-android-sdk.git`.

1. Open Android Studio and click "Open an existing project".

![Open an existing project](as_open_project.png)

1. Find the `firebase-android-sdk` directory and open.

1. To run integration/device tests you will need a `google-services.json` file.

Apache License

Version 2.0, January 2004

<http://www.apache.org/licenses/>

TERMS AND CONDITIONS FOR USE, REPRODUCTION, AND DISTRIBUTION

1. Definitions.

"License" shall mean the terms and conditions for use, reproduction, and distribution as defined by Sections 1 through 9 of this document.

"Licensor" shall mean the copyright owner or entity authorized by the copyright owner that is granting the License.

"Legal Entity" shall mean the union of the acting entity and all other entities that control, are controlled by, or are under common control with that entity. For the purposes of this definition, "control" means (i) the power, direct or indirect, to cause the direction or management of such entity, whether by contract or otherwise, or (ii) ownership of fifty percent (50%) or more of the outstanding shares, or (iii) beneficial ownership of such entity.

"You" (or "Your") shall mean an individual or Legal Entity exercising permissions granted by this License.

"Source" form shall mean the preferred form for making modifications, including but not limited to software source code, documentation source, and configuration files.

"Object" form shall mean any form resulting from mechanical transformation or translation of a Source form, including but not limited to compiled object code, generated documentation, and conversions to other media types.

"Work" shall mean the work of authorship, whether in Source or Object form, made available under the License, as indicated by a copyright notice that is included in or attached to the work (an example is provided in the Appendix below).

"Derivative Works" shall mean any work, whether in Source or Object form, that is based on (or derived from) the Work and for which the

editorial
revisions, annotations, elaborations, or other modifications
represent, as a whole, an original work of authorship. For the purposes
of this License, Derivative Works shall not include works that remain
separable from, or merely link (or bind by name) to the interfaces of,
the Work and Derivative Works thereof.

"Contribution" shall mean any work of authorship, including
the original version of the Work and any modifications or additions
to that Work or Derivative Works thereof, that is intentionally
submitted to Licensor for inclusion in the Work by the copyright owner
or by an individual or Legal Entity authorized to submit on behalf of
the copyright owner. For the purposes of this definition, "submitted"
means any form of electronic, verbal, or written communication sent
to the Licensor or its representatives, including but not limited to
communication on electronic mailing lists, source code control systems,
and issue tracking systems that are managed by, or on behalf of, the
Licensor for the purpose of discussing and improving the Work, but
excluding communication that is conspicuously marked or otherwise
designated in writing by the copyright owner as "Not a Contribution."

"Contributor" shall mean Licensor and any individual or Legal Entity
on behalf of whom a Contribution has been received by Licensor and
subsequently incorporated within the Work.

2. Grant of Copyright License. Subject to the terms and conditions of
this License, each Contributor hereby grants to You a perpetual,
worldwide, non-exclusive, no-charge, royalty-free, irrevocable
copyright license to reproduce, prepare Derivative Works of,
publicly display, publicly perform, sublicense, and distribute the
Work and such Derivative Works in Source or Object form.

3. Grant of Patent License. Subject to the terms and conditions of
this
License, each Contributor hereby grants to You a perpetual,
worldwide, non-exclusive, no-charge, royalty-free, irrevocable
(except as stated in this section) patent license to make, have made,
use, offer to sell, sell, import, and otherwise transfer the Work,
where such license applies only to those patent claims licensable
by such Contributor that are necessarily infringed by their
Contribution(s) alone or by combination of their Contribution(s)
with the Work to which such Contribution(s) was submitted. If You
institute patent litigation against any entity (including a
cross-claim or counterclaim in a lawsuit) alleging that the Work
or a Contribution incorporated within the Work constitutes direct
or contributory patent infringement, then any patent licenses
granted to You under this License for that Work shall terminate
as of the date such litigation is filed.

4. Redistribution. You may reproduce and distribute copies of the Work or Derivative Works thereof in any medium, with or without modifications, and in Source or Object form, provided that You meet the following conditions:

- (a) You must give any other recipients of the Work or Derivative Works a copy of this License; and
- (b) You must cause any modified files to carry prominent notices stating that You changed the files; and
- (c) You must retain, in the Source form of any Derivative Works that You distribute, all copyright, patent, trademark, and attribution notices from the Source form of the Work, excluding those notices that do not pertain to any part of the Derivative Works; and
- (d) If the Work includes a "NOTICE" text file as part of its distribution, then any Derivative Works that You distribute must include a readable copy of the attribution notices contained within such NOTICE file, excluding those notices that do not pertain to any part of the Derivative Works, in at least one of the following places: within a NOTICE text file distributed as part of the Derivative Works; within the Source form or documentation, if provided along with the Derivative Works; or, within a display generated by the Derivative Works, if and wherever such third-party notices normally appear. The contents of the NOTICE file are for informational purposes only and do not modify the License. You may add Your own attribution notices within Derivative Works that You distribute, alongside or as an addendum to the NOTICE text from the Work, provided that such additional attribution notices cannot be construed as modifying the License.

You may add Your own copyright statement to Your modifications and may provide additional or different license terms and conditions

for use, reproduction, or distribution of Your modifications, or for any such Derivative Works as a whole, provided Your use, reproduction, and distribution of the Work otherwise complies with the conditions stated in this License.

5. Submission of Contributions. Unless You explicitly state otherwise, any Contribution intentionally submitted for inclusion in the Work by You to the Licensor shall be under the terms and conditions of

this License, without any additional terms or conditions.

Notwithstanding the above, nothing herein shall supersede or modify the terms of any separate license agreement you may have executed with Licensor regarding such Contributions.

6. Trademarks. This License does not grant permission to use the trade names, trademarks, service marks, or product names of the Licensor, except as required for reasonable and customary use in describing the origin of the Work and reproducing the content of the NOTICE file.

7. Disclaimer of Warranty. Unless required by applicable law or agreed to in writing, Licensor provides the Work (and each Contributor provides its Contributions) on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied, including, without limitation, any warranties or conditions of TITLE, NON-INFRINGEMENT, MERCHANTABILITY, or FITNESS FOR A PARTICULAR PURPOSE. You are solely responsible for determining the appropriateness of using or redistributing the Work and assume any risks associated with Your exercise of permissions under this License.

8. Limitation of Liability. In no event and under no legal theory, whether in tort (including negligence), contract, or otherwise, unless required by applicable law (such as deliberate and grossly negligent acts) or agreed to in writing, shall any Contributor be liable to You for damages, including any direct, indirect, special, incidental, or consequential damages of any character arising as a result of this License or out of the use or inability to use the Work (including but not limited to damages for loss of goodwill, work stoppage, computer failure or malfunction, or any and all other commercial damages or losses), even if such Contributor has been advised of the possibility of such damages.

9. Accepting Warranty or Additional Liability. While redistributing the Work or Derivative Works thereof, You may choose to offer, and charge a fee for, acceptance of support, warranty, indemnity, or other liability obligations and/or rights consistent with this License. However, in accepting such obligations, You may act only on Your own behalf and on Your sole responsibility, not on behalf of any other Contributor, and only if You agree to indemnify, defend, and hold each Contributor harmless for any liability incurred by, or claims asserted against, such Contributor by reason of your accepting any such warranty or additional liability.

END OF TERMS AND CONDITIONS

APPENDIX: How to apply the Apache License to your work.

To apply the Apache License to your work, attach the following boilerplate notice, with the fields enclosed by brackets "[]" replaced with your own identifying information. (Don't include the brackets!) The text should be enclosed in the appropriate comment syntax for the file format. We also recommend that a file or class name and description of purpose be included on the same "printed page" as the copyright notice for easier identification within third-party archives.

Copyright [yyyy] [name of copyright owner]

Licensed under the Apache License, Version 2.0 (the "License");
you may not use this file except in compliance with the License.
You may obtain a copy of the License at

<http://www.apache.org/licenses/LICENSE-2.0>

Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License.

```
has_children: true
permalink: /onboarding/
nav_order: 2
```

```
# Onboarding
```

```
parent: Firebase Components
```

```
# Dependencies
```

```
{: .no_toc}
```

```
1. TOC
```

```
{:toc}
```

This page gives an overview of the different dependency types supported by the Components Framework.

```
## Background
```

As discussed in [Firebase Components]({{ site.baseurl }}{% link components/components.md %}), in order for a `Component` to be injected with the things it needs to function, it has to declare its dependencies. These dependencies are then made available and injected into `Components` at runtime.

Firebase Components provide different types of dependencies.

Lazy vs Eager dependencies

When it comes to initialize a component, there are 2 ways of provide its dependencies.

Direct Injection

With this type of injection, the component gets an instance of its dependency directly.

```
```kotlin
class MyComponent(private val dep : MyDep) {
 fun someMethod() {
 dep.use();
 }
}
```
```

As you can see above the component's dependency is passed by value directly, which means that the dependency needs to be fully initialized before it's handed off to the requesting component. As a result `MyComponent` may have to pay the cost of initializing `MyDep` just to be created.

Lazy/Provider Injection

With this type of injection, instead of getting an instance of the dependency directly, the dependency is passed into the `Component` with the help of a `com.google.firebase.inject.Provider`

```
```java
public interface Provider<T> { T get(); }
```

```kotlin
class MyComponent(private val dep : Provider<MyDep>) {
 fun someMethod() {
 // Since all components are singletons, each call to
 // get() will return the same instance.
 dep.get().use();
 }
}
```
```

On the surface this does not look like a big change, but it has an important side effect. In order to create an instance of `MyComponent`, we don't need to initialize `MyDep` anymore. Instead, initialization can be delayed until `MyDep` is actually used.

It is also beneficial to use a `Provider` in the context of [Play's dynamic

feature delivery](https://developer.android.com/guide/playcore/feature-delivery).

See [Dynamic Module Support]({{ site.baseurl }}{% link components/dynamic_modules.md %}) for more details.

Required dependencies

This type of dependency informs the `ComponentRuntime` that a given `Component` cannot function without a dependency.

When the dependency is missing during initialization, `ComponentRuntime` will throw a `MissingDependencyException`.

This type of dependency is useful for built-in components that are always present like `Context`, `FirebaseApp`, `FirebaseOptions`, [Executors]({{ site.baseurl }}{% link components/executors.md %}).

To declare a required dependency use one of the following in your `ComponentRegistrar`:

```
```java
// Required directly injected dependency
.add(Dependency.required(MyDep.class))
// Required lazily injected dependency
.add(Dependency.requiredProvider(MyOtherDep.class))
.factory(c -> new MyComponent(c.get(MyDep.class), c.getProvider(MyOtherDep.class)))
.build();
```
```

Optional Dependencies

This type of dependencies is useful when your `Component` can operate normally when the dependency is not available, but can have enhanced functionality when present. e.g. `Firestore` can work without `Auth` but provides secure database access when `Auth` is present.

To declare an optional dependency use the following in your `ComponentRegistrar`:

```
```java
.add(Dependency.optionalProvider(MyDep.class))
.factory(c -> new MyComponent(c.getProvider(MyDep.class)))
.build();
```
```

The provider will return `null` if the dependency is not present in the app.

{: .warning }

When the app uses [Play's dynamic feature delivery](https://developer.android.com/guide/playcore/feature-delivery),

`provider.get()` will return your dependency when it becomes available. To support this use case, don't store references to the result of `provider.get()` calls.

See [Dynamic Module Support]({{ site.baseurl }}{% link components/dynamic_modules.md %}) for details


```
{: .warning }
```

See Deferred dependencies if you your dependency has a callback based API

Deferred Dependencies

Useful for optional dependencies which have a listener-style API, i.e. the dependent component registers a listener with the dependency and never calls it again (instead the dependency will call the registered listener). A good example is `Firestore`'s use of `Auth`, where `Firestore` registers a token change listener to get notified when a new token is available. The problem is that when `Firestore` initializes, `Auth` may not be present in the app, and is instead part of a dynamic module that can be loaded at runtime on demand.

To solve this problem, Components have a notion of a `Deferred` dependency. A deferred is defined as follows:

```
```java
public interface Deferred<T> {
 interface DeferredHandler<T> {
 @DeferredApi
 void handle(Provider<T> provider);
 }

 void whenAvailable(DeferredHandler<T> handler);
}
```
```

To use it a component needs to call `Dependency.deferred(SomeType.class)`:

```
```kotlin
class MyComponent(deferred: Deferred<SomeType>) {
 init {
 deferred.whenAvailable { someType ->
 someType.registerListener(myListener)
 }
 }
}
```
```

See [\[Dynamic Module Support\]](#)([{{ site.baseurl }}{% link components/dynamic_modules.md %}](#)) for details

Set Dependencies

The Components Framework allows registering components to be part of a set, such components are registered explicitly to be a part of a `Set<T>` as opposed to be a unique value of `T`:

```
```java
// Sdk 1
Component.intoSet(new SomeTypeImpl(), SomeType.class);
// Sdk 2
```

```

Component.intoSetBuilder(SomeType.class)
 .add(Dependency(SomeDep.class))
 .factory(c -> new SomeOtherImpl(c.get(SomeDep.class)))
 .build();
...

```

With the above setup each SDK contributes a value of `SomeType` into a `Set<SomeType>` which becomes available as a `Set` dependency.

To consume such a set the interested `Component` needs to declare a special kind of dependency in one of 2 ways:

\*  
`Dependency.setOf(SomeType.class)`, a dependency of type `Set<SomeType>`.  
\* `Dependency.setOfProvider(SomeType.class)`, a dependency of type `Provider<Set<SomeType>>`. The advantage of this is that the `Set` is not initialized until the first call to `provider.get()` at which point all elements of the set will get initialized.

```
{: .warning }
```

Similar to optional `Provider` dependencies, where an optional dependency can become available at runtime due to [Play's dynamic feature delivery](https://developer.android.com/guide/playcore/feature-delivery), `Set` dependencies can change at runtime by new elements getting added to the set. So make sure to hold on to the original `Set` to be able to observe new values in it as they are added.

Example:

```

...kotlin
class MyClass(private val set1: Set<SomeType>, private val set2: Provider<Set<SomeOtherType>>)
...

```

```

...java
Component.builder(MyClass.class)
 .add(Dependency.setOf(SomeType.class))
 .add(Dependency.setOfProvider(SomeOtherType.class))
 .factory(c -> MyClass(c.setOf(SomeType.class), c.setOfProvider(SomeOtherType.class)))
 .build();
...

```

## 1.33 openssl 1.1.1w

### 1.33.1 Available under license :

LICENSE ISSUES

=====

The OpenSSL toolkit stays under a double license, i.e. both the conditions of

the OpenSSL License and the original SSLeay license apply to the toolkit.  
See below for the actual license texts.

## OpenSSL License

-----

/\* =====

\* Copyright (c) 1998-2019 The OpenSSL Project. All rights reserved.

\*

\* Redistribution and use in source and binary forms, with or without  
\* modification, are permitted provided that the following conditions  
\* are met:

\*

\* 1. Redistributions of source code must retain the above copyright  
\* notice, this list of conditions and the following disclaimer.

\*

\* 2. Redistributions in binary form must reproduce the above copyright  
\* notice, this list of conditions and the following disclaimer in  
\* the documentation and/or other materials provided with the  
\* distribution.

\*

\* 3. All advertising materials mentioning features or use  
of this

\* software must display the following acknowledgment:

\* "This product includes software developed by the OpenSSL Project  
\* for use in the OpenSSL Toolkit. (<http://www.openssl.org/>)"

\*

\* 4. The names "OpenSSL Toolkit" and "OpenSSL Project" must not be used to  
\* endorse or promote products derived from this software without  
\* prior written permission. For written permission, please contact  
\* [openssl-core@openssl.org](mailto:openssl-core@openssl.org).

\*

\* 5. Products derived from this software may not be called "OpenSSL"  
\* nor may "OpenSSL" appear in their names without prior written  
\* permission of the OpenSSL Project.

\*

\* 6. Redistributions of any form whatsoever must retain the following  
\* acknowledgment:

\* "This product includes software developed by the OpenSSL Project  
\* for use in the OpenSSL Toolkit (<http://www.openssl.org/>)"

\*

\* THIS SOFTWARE IS PROVIDED BY THE OpenSSL PROJECT ``AS IS" AND ANY  
\* EXPRESSED OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED  
TO, THE

\* IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR  
\* PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE OpenSSL PROJECT OR  
\* ITS CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL,  
\* SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT

\* NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES;  
\* LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION)  
\* HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT,  
\* STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE)  
\* ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED  
\* OF THE POSSIBILITY OF SUCH DAMAGE.

\* =====

\*

\* This product includes cryptographic software written by Eric Young  
\* (eay@cryptsoft.com). This product includes software written by Tim  
\* Hudson (tjh@cryptsoft.com).

\*

\*/

#### Original SSLeay License

-----

/\* Copyright (C) 1995-1998 Eric Young (eay@cryptsoft.com)

\* All rights reserved.

\*

\* This package is an SSL implementation written

\* by Eric Young (eay@cryptsoft.com).

\* The implementation was written so as to conform with Netscapes SSL.

\*

\* This library is free for commercial and non-commercial use as long as

\* the following conditions are aheared to. The following conditions

\* apply to all code found in this distribution, be it the RC4, RSA,

\* lhash, DES, etc., code; not just the SSL code. The SSL documentation

\* included with this distribution is covered by the same copyright terms

\* except that the holder is Tim Hudson (tjh@cryptsoft.com).

\*

\* Copyright remains Eric Young's, and as such any Copyright notices in

\* the code are not to be removed.

\* If this package is used in a product, Eric Young should be given attribution

\* as the author of the parts of the library used.

\* This can be in the form of a textual message at program startup or

\* in documentation (online or textual) provided with the package.

\*

\* Redistribution and use in source and binary forms, with or without

\* modification, are permitted provided that the following conditions

\* are met:

\* 1. Redistributions of source code must retain the copyright

\* notice, this list of conditions and the following disclaimer.

\* 2. Redistributions in binary form must reproduce the above copyright

\* notice, this list of conditions and the following disclaimer in the

\* documentation and/or other materials provided with the distribution.

\* 3. All advertising materials mentioning features or use of this software

\* must display the following acknowledgement:

- \* "This product includes cryptographic software written by
- \* Eric Young (eay@cryptsoft.com)"
- \* The word 'cryptographic' can be left out if the routines from the library
- \* being used are not cryptographic related :-).
- \* 4. If you include any Windows specific code (or a derivative thereof) from
- \* the apps directory (application code) you must include
- an acknowledgement:
- \* "This product includes software written by Tim Hudson (tjh@cryptsoft.com)"
- \*
- \* THIS SOFTWARE IS PROVIDED BY ERIC YOUNG ``AS IS'' AND
- \* ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE
- \* IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE
- \* ARE DISCLAIMED. IN NO EVENT SHALL THE AUTHOR OR CONTRIBUTORS BE LIABLE
- \* FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL
- \* DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS
- \* OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION)
- \* HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT
- \* LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY
- \* OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF
- \* SUCH DAMAGE.
- \*
- \* The licence and distribution terms for any publically available version or
- \* derivative of this code cannot be changed. i.e. this
- code cannot simply be
- \* copied and put under another distribution licence
- \* [including the GNU Public Licence.]
- \*/

GNU GENERAL PUBLIC LICENSE

Version 2, June 1991

Copyright (C) 1989, 1991 Free Software Foundation, Inc.

59 Temple Place - Suite 330, Boston, MA

02111-1307, USA.

Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed.

Preamble

The licenses for most software are designed to take away your freedom to share and change it. By contrast, the GNU General Public License is intended to guarantee your freedom to share and change free software--to make sure the software is free for all its users. This General Public License applies to most of the Free Software Foundation's software and to any other program whose authors commit to using it. (Some other Free Software Foundation software is covered by the GNU Library General Public License instead.) You can apply it to your programs, too.

When we speak of free software, we are referring to freedom, not price.

Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish), that you receive source code or can get it if you want it, that you can change the software or use pieces of it in new free programs; and that you know you can do these things.

To protect your rights, we need to make restrictions that forbid anyone to deny you these rights or to ask you to surrender the rights. These restrictions translate to certain responsibilities for you if you distribute copies of the software, or if you modify it.

For example, if you distribute copies of such a program, whether gratis or for a fee, you must give the recipients all the rights that you have. You must make sure that they, too, receive or can get the source code. And you must show them these terms so they know their rights.

We protect your rights with two steps: (1) copyright the software, and (2) offer you this license which gives you legal permission to copy, distribute and/or modify the software.

Also, for each author's protection and ours, we want to make certain that everyone understands that there is no warranty for this free software. If the software is modified by someone else and passed on, we want its recipients to know that what they have is not the original, so that any problems introduced by others will not reflect on the original authors' reputations.

Finally, any free program is threatened constantly by software patents. We wish to avoid the danger that redistributors of a free program will individually obtain patent licenses, in effect making the program proprietary. To prevent this, we have made it clear that any patent must be licensed for everyone's free use or not licensed at all.

The precise terms and conditions for copying, distribution and modification follow.

## GNU GENERAL PUBLIC LICENSE TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

### 0. This

License applies to any program or other work which contains a notice placed by the copyright holder saying it may be distributed under the terms of this General Public License. The "Program", below, refers to any such program or work, and a "work based on the Program"

means either the Program or any derivative work under copyright law: that is to say, a work containing the Program or a portion of it, either verbatim or with modifications and/or translated into another language. (Hereinafter, translation is included without limitation in the term "modification".) Each licensee is addressed as "you".

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running the Program is not restricted, and the output from the Program is covered only if its contents constitute a work based on the Program (independent of having been made by running the Program). Whether that is true depends on what the Program does.

1. You may copy and distribute verbatim copies of the Program's source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty; and give any other recipients of the Program a copy of this License along with the Program.

You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.

2. You may modify your copy or copies of the Program or any portion of it, thus forming a work based on the Program, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:

a) You must cause the modified files to carry prominent notices stating that you changed the files and the date of any change.

b) You must cause any work that you distribute or publish, that in whole or in part contains or is derived from the Program or any part thereof, to be licensed as a whole at no charge to all third parties under the terms of this License.

c) If the modified program normally reads commands interactively when run, you must cause it, when started running for such interactive use in the most ordinary way, to print or display an announcement including an appropriate copyright notice and a notice that there is no warranty (or else, saying that you provide a warranty) and that users may redistribute the program under these conditions, and telling the user how to view a copy of this License. (Exception: if the Program itself is interactive but does not normally print such an announcement, your work based on the Program is not required to print an announcement.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Program, 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 Program, 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.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Program.

In addition, mere aggregation of another work not based on the Program with the Program (or with a work based on the Program) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

### 3. You may

copy and distribute the Program (or a work based on it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you also do one of the following:

a) Accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,

b) 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,

c) Accompany it with the information you received as to the offer to distribute corresponding source code. (This alternative is allowed only for noncommercial distribution and only if you received the program in object code or executable form with such an offer, in accord with Subsection b above.)

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.

If distribution of executable or object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place counts as distribution of the source code, even though third parties are not compelled to copy the source along with the object code.

4. You may not copy, modify, sublicense, or distribute the Program except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense or distribute the Program is void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.

5. You are not required to accept this License, since you have not signed it. However, nothing else grants you permission to modify or distribute the Program or its derivative works. These actions are prohibited by law if you do not accept this License. Therefore, by modifying or distributing the Program (or any work based on the Program), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Program or works based on it.

6. Each time you redistribute the Program (or any work based on the Program), the recipient automatically receives a license from the original licensor to copy, distribute or modify the Program subject to these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties to this License.

7. If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot distribute so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you

may not distribute the Program at all. For example, if a patent license would not permit royalty-free redistribution of the Program by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Program.

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply and the section as a whole is intended to apply in other circumstances.

It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system, which is implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system in reliance on consistent application of that system; it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot impose that choice.

This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this License.

8. If the distribution and/or use of the Program is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Program under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.

9. The Free Software Foundation may publish revised and/or new versions of the General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number.

If the Program specifies a version number of this License which applies to it and "any later version", you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation. If the Program does not specify a version number of this License, you may choose any version ever published by the Free Software Foundation.

10. If you wish to incorporate parts of the Program into other free programs whose distribution conditions are different, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.

#### NO WARRANTY

11. BECAUSE THE PROGRAM IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE PROGRAM, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE PROGRAM "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE PROGRAM IS WITH YOU. SHOULD THE PROGRAM PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

12. IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE PROGRAM AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE PROGRAM (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE PROGRAM TO OPERATE WITH ANY OTHER PROGRAMS), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

#### END OF TERMS AND CONDITIONS

##### 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.

<one line to give the program's name and a brief idea of what it does.>

Copyright (C) 19yy <name of author>

This program is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 2 of the License, or (at your option) any later version.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with this program; if not, write to the Free Software Foundation, Inc., 59 Temple Place - Suite 330, Boston, MA 02111-1307, 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) 19yy 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 is a sample; alter the names:

```
Yoyodyne, Inc., hereby disclaims all copyright interest in the program
`Gnomovision' (which makes passes at compilers) written by James Hacker.
```

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

This General Public License does not permit incorporating your program into proprietary programs. If your program is a subroutine library, you may consider it more useful to permit linking proprietary applications with the library. If this is what you want to do, use the GNU Library General Public

License instead of this License.

The "Artistic License"

Preamble

The intent of this document is to state the conditions under which a Package may be copied, such that the Copyright Holder maintains some semblance of artistic control over the development of the package, while giving the users of the package the right to use and distribute the Package in a more-or-less customary fashion, plus the right to make reasonable modifications.

Definitions:

"Package" refers to the collection of files distributed by the Copyright Holder, and derivatives of that collection of files created through textual modification.

"Standard Version" refers to such a Package if it has not been modified, or has been modified in accordance with the wishes of the Copyright Holder as specified below.

"Copyright Holder" is whoever is named in the copyright or copyrights for the package.

"You" is you, if you're thinking about copying or distributing this Package.

"Reasonable copying fee" is whatever you can justify on the basis of media cost, duplication charges, time of people involved, and so on. (You will not be required to justify it to the Copyright Holder, but only to the computing community at large as a market that must bear the fee.)

"Freely Available" means that no fee is charged for the item itself, though there may be fees involved in handling the item. It also means that recipients of the item may redistribute it under the same conditions they received it.

1. You may make and give away verbatim copies of the source form of the Standard Version of this Package without restriction, provided that you duplicate all of the original copyright notices and associated disclaimers.

2. You may apply bug fixes, portability fixes and other modifications derived from the Public Domain or from the Copyright Holder. A Package modified in such a way shall still be considered the Standard Version.
  
3. You may otherwise modify your copy of this Package in any way, provided that you insert a prominent notice in each changed file stating how and when you changed that file, and provided that you do at least ONE of the following:
  - a) place your modifications in the Public Domain or otherwise make them Freely Available, such as by posting said modifications to Usenet or an equivalent medium, or placing the modifications on a major archive site such as uunet.uu.net, or by allowing the Copyright Holder to include your modifications in the Standard Version of the Package.
  
  - b) use the modified Package only within your corporation or organization.
  
  - c) rename any non-standard executables so the names do not conflict with standard executables, which must also be provided, and provide a separate manual page for each non-standard executable that clearly documents how it differs from the Standard Version.
  
  - d) make other distribution arrangements with the Copyright Holder.
  
4. You may distribute the programs of this Package in object code or executable form, provided that you do at least ONE of the following:
  - a) distribute a Standard Version of the executables and library files, together with instructions (in the manual page or equivalent) on where to get the Standard Version.
  
  - b) accompany the distribution with the machine-readable source of the Package with your modifications.
  
  - c) give non-standard executables non-standard names, and clearly document the differences in manual pages (or equivalent), together with instructions on where to get the Standard Version.
  
  - d) make other distribution arrangements with the Copyright Holder.
  
5. You may charge a reasonable copying fee for any distribution of this Package. You may charge any fee you choose for support of this Package. You may not charge a fee for this Package itself. However, you may distribute this Package in aggregate with other (possibly commercial) programs as part of a larger (possibly commercial) software distribution provided

that you do not advertise this Package as a product of your own. You may embed this Package's interpreter within an executable of yours (by linking); this shall be construed as a mere form of aggregation, provided that the complete Standard Version of the interpreter is so embedded.

6. The scripts and library files supplied as input to or produced as output from the programs of this Package do not automatically fall under the copyright of this Package, but belong to whoever generated them, and may be sold commercially, and may be aggregated with this Package. If such scripts or library files are aggregated with this Package via the so-called "undump" or "unexec" methods of producing a binary executable image, then distribution of such an image shall neither be construed as a distribution of this Package nor shall it fall under the restrictions of Paragraphs 3 and 4, provided that you do not represent such an executable image as a Standard Version of this Package.

7. C subroutines

(or comparably compiled subroutines in other languages) supplied by you and linked into this Package in order to emulate subroutines and variables of the language defined by this Package shall not be considered part of this Package, but are the equivalent of input as in Paragraph 6, provided these subroutines do not change the language in any way that would cause it to fail the regression tests for the language.

8. Aggregation of this Package with a commercial distribution is always permitted provided that the use of this Package is embedded; that is, when no overt attempt is made to make this Package's interfaces visible to the end user of the commercial distribution. Such use shall not be construed as a distribution of this Package.

9. The name of the Copyright Holder may not be used to endorse or promote products derived from this software without specific prior written permission.

10. THIS PACKAGE IS PROVIDED "AS IS" AND WITHOUT ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, WITHOUT LIMITATION, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

The End

## 1.34 crashlytics 31.4.0

## 1.34.1 Available under license :

SDK:

protobuf-c <http://code.google.com/p/protobuf-c/source/browse/trunk/LICENSE>

Copyright (c) 2008-2011, Dave Benson.

All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

\* Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.

\* Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

\* Neither the name of "protobuf-c" nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT HOLDER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

Square Tape - QueueFile.java <https://raw.githubusercontent.com/square/tape/master/LICENSE.txt>

Copyright 2012 Square, Inc.

Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License.

You may obtain a copy of the License at <http://www.apache.org/licenses/LICENSE-2.0>



Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License.

This file has been modified from its original licensed form.  
Modifications are Copyright (C) 2013 Twitter, Inc.

Apache Software Foundation <http://www.apache.org/licenses/LICENSE-2.0>

Apache Commons CLI  
Copyright 2001-2013 The Apache Software Foundation

Apache Commons Codec  
Copyright 2002-2013 The Apache Software Foundation

Apache Felix Copyright  
2006-2013 The Apache Software Foundation

Apache HttpComponents Client  
Copyright 1999-2013 The Apache Software Foundation

Apache HttpComponents Core  
Copyright 1999-2013 The Apache Software Foundation

Apache log4j  
Copyright 2010-2013 The Apache Software Foundation

Licensed under the Apache License, Version 2.0 (the "License");  
you may not use this file except in compliance with the License.  
You may obtain a copy of the License at <http://www.apache.org/licenses/LICENSE-2.0>

Unless  
required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License.

JSON.simple <http://code.google.com/p/json-simple/source/browse/trunk/LICENSE.txt>

Copyright 2006-2012 Yidong Fang Chris Nokleberg Dave Hughes

Licensed under the Apache License, Version 2.0 (the "License");  
you may not use this file except in compliance with the License.  
You may obtain a copy of the License at <http://www.apache.org/licenses/LICENSE-2.0>

Unless required by applicable law or agreed to in writing, software  
distributed under the License is distributed on an "AS IS" BASIS,  
WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.  
See the License for the specific language governing permissions and  
limitations under the License.

SLF4J  
<http://www.slf4j.org/license.html>

Copyright (c) 2004-2013 QOS.ch  
All rights reserved.

Permission is hereby granted, free of charge, to any person obtaining  
a copy of this software and associated documentation files (the  
"Software"), to deal in the Software without restriction, including  
without limitation the rights to use, copy, modify, merge, publish,  
distribute, sublicense, and/or sell copies of the Software, and to  
permit persons to whom the Software is furnished to do so, subject to  
the following conditions:

The above copyright notice and this permission notice shall be  
included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND,  
EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF  
MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND  
NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE  
LIABLE FOR ANY CLAIM, DAMAGES OR OTHER  
LIABILITY, WHETHER IN AN ACTION  
OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION  
WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

Timing Framework <https://java.net/projects/timingframework>

Copyright (c) 2013, SureLogic, Inc

Licensed under the Apache License, Version 2.0 (the "License");  
you may not use this file except in compliance with the License.

You may obtain a copy of the License at <http://www.apache.org/licenses/LICENSE-2.0>

Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License.

Otto - <https://raw.githubusercontent.com/square/otto/master/LICENSE.txt>

Copyright 2013 Square, Inc.

Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License.

You may obtain a copy of the License at

<http://www.apache.org/licenses/LICENSE-2.0>

Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License.

Beta By Crashlytics App:

Android Open Source Project <https://source.android.com/>

Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License.

You may obtain a copy of the License at

<http://www.apache.org/licenses/LICENSE-2.0>

Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License.

ASM Core <http://asm.ow2.org/>

Copyright (c) 2000-2011 INRIA, France Telecom  
All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. Neither the name of the copyright holders nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

Auto <https://github.com/google/auto>

Copyright 2013 Google, Inc.

Licensed under the Apache License, Version 2.0 (the "License");  
you may not use this file except in compliance with the License.  
You may obtain a copy of the License at

<http://www.apache.org/licenses/LICENSE-2.0>

Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.  
See the License for the specific language governing permissions and limitations under the License.

ButterKnife <http://jakewharton.github.io/butterknife/>

Copyright 2013 Jake Wharton

Licensed under the Apache License, Version 2.0 (the "License");  
you may not use this file except in compliance with the License.

You may obtain a copy of the License at

<http://www.apache.org/licenses/LICENSE-2.0>

Unless required by applicable law or agreed to in writing, software  
distributed under the License is distributed on an "AS IS" BASIS,  
WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.  
See the License for the specific language governing permissions and  
limitations under the License.

Dagger: <http://square.github.io/dagger/>

Copyright 2013 Square, Inc.

Licensed under the Apache License, Version 2.0 (the "License");  
you may not use this file except in compliance with the License.

You may obtain a copy of the License at

<http://www.apache.org/licenses/LICENSE-2.0>

Unless required by applicable law or agreed to in writing, software  
distributed under the License is distributed on an "AS IS" BASIS,  
WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.  
See the License for the specific language governing permissions and  
limitations under the License.

Guava <https://github.com/google/guava>

Copyright (C) 2010 The Guava Authors

Licensed under the Apache License, Version 2.0 (the "License");  
you may not use this file except in compliance with the License.

You may obtain a copy of the License at

<http://www.apache.org/licenses/LICENSE-2.0>

Unless required by applicable law or agreed to in writing, software  
distributed under the License is distributed on an "AS IS" BASIS,

WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.  
See the License for the specific language governing permissions and  
limitations under the License.

JavaWriter [https://github.com/square/javapoet/tree/javawriter\\_2](https://github.com/square/javapoet/tree/javawriter_2)

Copyright  
2013 Square, Inc.

Licensed under the Apache License, Version 2.0 (the "License");  
you may not use this file except in compliance with the License.  
You may obtain a copy of the License at

<http://www.apache.org/licenses/LICENSE-2.0>

Unless required by applicable law or agreed to in writing, software  
distributed under the License is distributed on an "AS IS" BASIS,  
WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.  
See the License for the specific language governing permissions and  
limitations under the License.

Nine Old Androids <https://github.com/JakeWharton/NineOldAndroids>

Copyright 2012 Jake Wharton

Licensed under the Apache License, Version 2.0 (the "License");  
you may not use this file except in compliance with the License.  
You may obtain a copy of the License at

<http://www.apache.org/licenses/LICENSE-2.0>

Unless required by applicable law or agreed to in writing, software  
distributed under the License is distributed on  
an "AS IS" BASIS,  
WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.  
See the License for the specific language governing permissions and  
limitations under the License.

Material Dialogs <https://github.com/afollestad/material-dialogs>

Copyright (c) 2015 Aidan Michael Follestad

Permission is hereby granted, free of charge, to any person obtaining a copy  
of this software and associated documentation files (the "Software"), to deal  
in the Software without restriction, including without limitation the rights

to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS

FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

Otto <http://square.github.io/otto/>

Copyright 2013 Square, Inc.

Licensed under the Apache License, Version 2.0 (the "License");  
you may not use this file except in compliance with the License.  
You may obtain a copy of the License at

<http://www.apache.org/licenses/LICENSE-2.0>

Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License.

Picasso <http://square.github.io/picasso/>

Copyright 2013 Square, Inc.

Licensed under  
the Apache License, Version 2.0 (the "License");  
you may not use this file except in compliance with the License.  
You may obtain a copy of the License at

<http://www.apache.org/licenses/LICENSE-2.0>

Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.

See the License for the specific language governing permissions and limitations under the License.

RxAndroid <https://github.com/ReactiveX/RxAndroid>

Licensed under the Apache License, Version 2.0 (the "License");  
you may not use this file except in compliance with the License.  
You may obtain a copy of the License at

<http://www.apache.org/licenses/LICENSE-2.0>

Unless required by applicable law or agreed to in writing, software  
distributed under the License is distributed on an "AS IS" BASIS,  
WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.  
See the License  
for the specific language governing permissions and  
limitations under the License.

RxJava <https://github.com/ReactiveX/RxJava>

Copyright 2013 Netflix, Inc.

Licensed under the Apache License, Version 2.0 (the "License");  
you may not use this file except in compliance with the License.  
You may obtain a copy of the License at

<http://www.apache.org/licenses/LICENSE-2.0>

Unless required by applicable law or agreed to in writing, software  
distributed under the License is distributed on an "AS IS" BASIS,  
WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.  
See the License for the specific language governing permissions and  
limitations under the License.

Timber: <https://github.com/JakeWharton/timber>

Copyright 2013 Jake Wharton

Licensed under the Apache License, Version 2.0 (the "License");  
you may not use this file except in compliance with the License.  
You may obtain a copy of the License at

<http://www.apache.org/licenses/LICENSE-2.0>

Unless required by applicable



law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License.

JSR-250 Common Annotations for the Java™ Platform:

<http://jcp.org/aboutJava/communityprocess/final/jsr250/index.html>

COMMON DEVELOPMENT AND DISTRIBUTION LICENSE (CDDL) Version 1.0 1.

Definitions.

1.1. Contributor means each individual or entity that creates or contributes to the creation of Modifications.

1.2. Contributor Version means the combination of the Original Software, prior Modifications used by a Contributor (if any), and the Modifications made by that particular Contributor.

1.3. Covered Software means (a) the Original Software, or (b) Modifications, or (c) the combination of files containing Original Software with files containing Modifications, in each case including portions thereof.

1.4.

Executable means the Covered Software in any form other than Source Code.

1.5. Initial Developer means the individual or entity that first makes Original Software available under this License.

1.6. Larger Work means a work which combines Covered Software or portions thereof with code not governed by the terms of this License.

1.7. License means this document.

1.8. Licensable means having the right to grant, to the maximum extent possible, whether at the time of the initial grant or subsequently acquired, any and all of the rights conveyed herein.

1.9. Modifications means the Source Code and Executable form of any of the following: A. Any file that results from an addition to, deletion from or modification of the contents of a file containing Original Software or previous Modifications; B. Any new file that contains any part of the Original Software or previous Modification; or C. Any new file that is contributed or otherwise made available under the terms of this License.

1.10. Original

Software means the Source Code and Executable form of computer software code that is originally released under this License.

1.11. Patent Claims means any patent claim(s), now owned or hereafter acquired, including without limitation, method, process, and apparatus claims, in any patent Licensable by grantor.

1.12. Source Code means (a) the common form of computer software code in which modifications are made and (b) associated documentation included in or with such code.

1.13. You (or Your) means an individual or a legal entity exercising rights under, and complying with all of the terms of, this License. For legal entities, You includes any entity which controls, is controlled by, or is under common control with You. For purposes of this definition, control means (a) the power, direct or indirect, to cause the direction or management of such entity, whether by contract or otherwise, or (b) ownership of more than fifty percent (50%) of the outstanding shares or beneficial ownership of such entity.

## 2. License Grants.

2.1. The Initial Developer Grant. Conditioned upon Your compliance with Section 3.1 below and subject to third party intellectual property claims, the Initial Developer hereby grants You a world-wide, royalty-free, non-exclusive license:

(a) under intellectual property rights (other than patent or trademark) Licensable by Initial Developer, to use, reproduce, modify, display, perform, sublicense and distribute the Original Software (or portions thereof), with or without Modifications, and/or as part of a Larger Work; and

(b) under Patent Claims infringed by the making, using or selling of Original Software, to make, have made, use, practice, sell, and offer for sale, and/or otherwise dispose of the Original Software (or portions thereof);

(c) The licenses granted in Sections 2.1(a) and (b) are effective on the date Initial Developer first distributes or otherwise makes the Original Software available to a third party under the terms of this License;

(d) Notwithstanding Section 2.1(b) above, no patent license is granted: (1) for code that You delete from the Original Software, or (2) for infringements caused by: (i) the modification of the Original Software, or (ii) the combination of the Original Software with other software or devices.

2.2. Contributor Grant. Conditioned upon Your compliance with Section 3.1 below and subject to third party intellectual property claims, each Contributor hereby grants You a world-wide, royalty-free, non-exclusive license:

(a) under intellectual property rights (other than patent or trademark) Licensable by Contributor to use, reproduce, modify, display, perform, sublicense and distribute the Modifications created by such Contributor (or portions thereof), either on an unmodified basis, with other Modifications, as Covered Software and/or as part of a Larger Work; and

(b) under Patent Claims infringed by the making, using, or selling of Modifications made by that Contributor either alone and/or in combination with its Contributor Version (or portions of such combination), to make, use, sell, offer for sale, have made, and/or otherwise dispose of: (1) Modifications made by that Contributor (or portions thereof); and (2) the combination of Modifications made by that Contributor with its Contributor Version (or portions of such combination).

(c) The licenses granted in Sections 2.2(a) and 2.2(b) are effective on the date Contributor first distributes or otherwise makes the Modifications available to a third party.

(d) Notwithstanding Section 2.2(b) above, no patent license is granted: (1) for any code that Contributor has deleted from the Contributor Version; (2) for infringements caused by: (i) third party modifications of Contributor Version,

or (ii) the combination of Modifications made by that Contributor with other software (except as part of the Contributor Version) or other devices; or (3) under Patent Claims infringed by Covered Software in the absence of Modifications made by that Contributor.

### 3. Distribution Obligations.

3.1. Availability of Source Code. Any Covered Software that You distribute or otherwise make available in Executable form must also be made available in Source Code form and that Source Code form must be distributed only under the terms of this License. You must include a copy of this License with every copy of the Source Code form of the Covered Software You distribute or otherwise make available. You must inform recipients of any such Covered Software in Executable form as to how they can obtain such Covered Software in Source Code form in a reasonable manner on or through a medium customarily used for software exchange.

3.2. Modifications. The Modifications that You create or to which You contribute are governed by the terms of this License. You represent that You believe Your Modifications are Your original creation(s) and/or You have sufficient rights to grant the rights conveyed by this License.

#### 3.3. Required

Notices. You must include a notice in each of Your Modifications that identifies You as the Contributor of the Modification. You may not remove or alter any copyright, patent or trademark notices contained within the Covered Software, or any notices of licensing or any descriptive text giving attribution to any Contributor or the Initial Developer.

3.4. Application of Additional Terms. You may not offer or impose any terms on any Covered Software in Source Code form that alters or restricts the applicable version of this License or the recipients rights hereunder. You may choose to offer, and to charge a fee for, warranty, support, indemnity or liability obligations to one or more recipients of Covered Software. However, you may do so only on Your own behalf, and not on behalf of the Initial Developer or any Contributor. You must make it absolutely clear that any such warranty, support, indemnity or liability obligation is offered by You alone, and You hereby agree to indemnify the Initial Developer and every Contributor for any liability incurred by the Initial Developer or such Contributor as a result of warranty, support, indemnity or liability terms You offer.

3.5. Distribution of Executable Versions. You may distribute the Executable form of the Covered Software under the terms of this License or under the terms of a license of Your choice, which may contain terms different from this License, provided that You are in compliance with the terms of this License and that the license for the Executable form does not attempt to limit or alter the recipients rights in the Source Code form from the rights set forth in this License. If You distribute the Covered Software in Executable form under a different license, You must make it absolutely clear that any terms which differ from this License are offered by You alone, not by the Initial Developer or Contributor. You hereby agree to indemnify the Initial Developer and every Contributor for any liability incurred by the Initial Developer or such Contributor as a result of any such terms You offer.

3.6. Larger Works. You may create a Larger Work by combining Covered Software with other code not governed by the terms of this License and distribute the Larger Work as a single product. In such a case, You must make sure the requirements of this License are fulfilled for the Covered Software.

### 4. Versions of the License.

4.1. New Versions. Sun Microsystems, Inc. is the initial license steward and may publish revised and/or new

versions of this License from time to time. Each version will be given a distinguishing version number. Except as provided in Section 4.3, no one other than the license steward has the right to modify this License.

4.2. Effect of New Versions. You may always continue to use, distribute or otherwise make the Covered Software available under the terms of the version of the License under which You originally received the Covered Software. If the Initial Developer includes a

notice in the Original Software prohibiting it from being distributed or otherwise made available under any subsequent version of the License, You must distribute and make the Covered Software available under the terms of the version of the License under which You originally received the Covered Software. Otherwise, You may also choose to use, distribute or otherwise make the Covered Software available under the terms of any subsequent version of the License published by the license steward.

4.3. Modified Versions. When You are an Initial Developer and You want to create a new license for Your Original Software, You may create and use a modified version of this License if You: (a) rename the license and remove any references to the name of the license steward (except to note that the license differs from this License); and (b) otherwise make it clear that the license contains terms which differ from this License.

5. DISCLAIMER OF WARRANTY. COVERED SOFTWARE IS PROVIDED UNDER THIS LICENSE ON AN AS IS BASIS, WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, WITHOUT LIMITATION, WARRANTIES THAT THE COVERED SOFTWARE IS FREE OF DEFECTS, MERCHANTABILITY, FIT FOR A PARTICULAR PURPOSE OR NON-INFRINGEMENT. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE COVERED SOFTWARE IS WITH YOU. SHOULD ANY COVERED SOFTWARE PROVE DEFECTIVE IN ANY RESPECT, YOU (NOT THE INITIAL DEVELOPER OR ANY OTHER CONTRIBUTOR) ASSUME THE COST OF ANY NECESSARY SERVICING, REPAIR OR CORRECTION. THIS DISCLAIMER OF WARRANTY CONSTITUTES AN ESSENTIAL PART OF THIS LICENSE. NO USE OF ANY COVERED SOFTWARE IS AUTHORIZED HEREUNDER EXCEPT UNDER THIS DISCLAIMER.

6. TERMINATION.

6.1. This License and the rights granted hereunder will terminate automatically if You fail to comply with terms herein and fail to cure such breach within 30 days of becoming aware of the breach. Provisions which, by their nature, must remain in effect beyond the termination of this License shall survive.

6.2. If You

assert a patent infringement claim (excluding declaratory judgment actions) against Initial Developer or a Contributor (the Initial Developer or Contributor against whom You assert such claim is referred to as Participant) alleging that the Participant Software (meaning the Contributor Version where the Participant is a Contributor or the Original Software where the Participant is the Initial Developer) directly or indirectly infringes any patent, then any and all rights granted directly or indirectly to You by such Participant, the Initial Developer (if the Initial Developer is not the Participant) and all Contributors under Sections 2.1 and/or 2.2 of this License shall, upon 60 days notice from Participant terminate prospectively and automatically at the expiration of such 60 day notice period, unless if within such 60 day period You withdraw Your claim with respect to the Participant Software against such Participant either unilaterally or pursuant to a written agreement with Participant.

6.3.

In the event of termination under Sections 6.1 or 6.2 above, all end user licenses that have been validly granted by You or any distributor hereunder prior to termination (excluding licenses granted to You by any distributor) shall

survive termination.

7. **LIMITATION OF LIABILITY.** UNDER NO CIRCUMSTANCES AND UNDER NO LEGAL THEORY, WHETHER TORT (INCLUDING NEGLIGENCE), CONTRACT, OR OTHERWISE, SHALL YOU, THE INITIAL DEVELOPER, ANY OTHER CONTRIBUTOR, OR ANY DISTRIBUTOR OF COVERED SOFTWARE, OR ANY SUPPLIER OF ANY OF SUCH PARTIES, BE LIABLE TO ANY PERSON FOR ANY INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES OF ANY CHARACTER INCLUDING, WITHOUT LIMITATION, DAMAGES FOR LOST PROFITS, LOSS OF GOODWILL, WORK STOPPAGE, COMPUTER FAILURE OR MALFUNCTION, OR ANY AND ALL OTHER COMMERCIAL DAMAGES OR LOSSES, EVEN IF SUCH PARTY SHALL HAVE BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. THIS LIMITATION OF LIABILITY SHALL NOT APPLY TO LIABILITY FOR DEATH OR PERSONAL INJURY RESULTING FROM SUCH PARTY'S NEGLIGENCE TO THE EXTENT APPLICABLE LAW PROHIBITS SUCH LIMITATION. SOME JURISDICTIONS DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THIS EXCLUSION AND LIMITATION MAY NOT APPLY TO YOU.

8. **U.S. GOVERNMENT END USERS.** The Covered Software is a commercial item, as that term is defined in 48 C.F.R. 2.101 (Oct. 1995), consisting of commercial computer software (as that term is defined at 48 C.F.R. 252.227-7014(a)(1)) and commercial computer software documentation as such terms are used in 48 C.F.R. 12.212 (Sept. 1995). Consistent with 48 C.F.R. 12.212 and 48 C.F.R. 227.7202-1 through 227.7202-4 (June 1995), all U.S. Government End Users acquire Covered Software with only those rights set forth herein. This U.S. Government Rights clause is in lieu of, and supersedes, any other FAR, DFAR, or other clause or provision that addresses Government rights in computer software under this License.

9. **MISCELLANEOUS.** This License represents the complete agreement concerning subject matter hereof. If any provision of this License is held to be unenforceable, such provision shall be reformed only to the extent necessary to make it enforceable. This License shall be governed by the law of the jurisdiction specified in a notice contained within the Original Software (except to the extent applicable law, if any, provides otherwise), excluding such jurisdictions conflict-of-law provisions. Any litigation relating to this License shall be subject to the jurisdiction of the courts located in the jurisdiction and venue specified in a notice contained within the Original Software, with the losing party responsible for costs, including, without limitation, court costs and reasonable attorneys fees and expenses. The application of the United Nations Convention on Contracts for the International Sale of Goods is expressly excluded. Any law or regulation which provides that the language of a contract shall be construed against the drafter shall not apply to this License. You agree that You alone are responsible for compliance with the United States export administration regulations (and the export control laws and regulation of any other countries) when You use, distribute or otherwise make available any Covered Software.

10. **RESPONSIBILITY FOR CLAIMS.** As between Initial Developer and the Contributors, each party is responsible for claims and damages arising, directly or indirectly, out of its utilization of rights under this License and You agree to work with Initial Developer and Contributors to distribute such responsibility on an equitable basis. Nothing herein is intended or shall be deemed to constitute any admission of liability.

**NOTICE PURSUANT TO SECTION 9 OF THE COMMON DEVELOPMENT AND DISTRIBUTION LICENSE (CDDL)** The code released under the CDDL shall be governed by the laws of the State of California (excluding conflict-of-law provisions). Any litigation relating to this License shall be subject to the jurisdiction

of the Federal Courts of the Northern District of California and the state courts of the State of California, with venue lying in Santa Clara County, California.

## 1.35 sipcc 12.8.0

### 1.35.1 Available under license :

Copyright 2008, Google Inc.

All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

\* Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.

\* Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

\* Neither the name of Google Inc. nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR

CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

Copyright (c) 2015, NPPT

All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

\* Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.

\* Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT HOLDER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

Apache License  
Version 2.0, January 2004  
<http://www.apache.org/licenses/>

## TERMS AND CONDITIONS FOR USE, REPRODUCTION, AND DISTRIBUTION

### 1. Definitions.

"License" shall mean the terms and conditions for use, reproduction, and distribution as defined by Sections 1 through 9 of this document.

"Licensor" shall mean the copyright owner or entity authorized by the copyright owner that is granting the License.

"Legal Entity" shall mean the union of the acting entity and all other entities that control, are controlled by, or are under common control with that entity. For the purposes of this definition, "control" means (i) the power, direct or indirect, to cause the direction or management of such entity, whether by contract or otherwise, or (ii) ownership of fifty percent (50%) or more of the outstanding shares, or (iii) beneficial ownership of such entity.

"You" (or "Your") shall mean an individual or Legal Entity exercising permissions granted by this License.

"Source" form shall mean the preferred form for making modifications, including but not limited to software source code, documentation source, and configuration files.

"Object" form shall mean any form resulting from mechanical transformation or translation of a Source form, including but not limited to compiled object code, generated documentation, and conversions to other media types.

"Work" shall mean the work of authorship, whether in Source or Object form, made available under the License, as indicated by a copyright notice that is included in or attached to the work (an example is provided in the Appendix below).

"Derivative Works" shall mean any work, whether in Source or Object form, that is based on (or derived from) the Work and for which the editorial revisions, annotations, elaborations, or other modifications represent, as a whole, an original work of authorship. For the purposes of this License, Derivative Works shall not include works that remain separable from, or merely link (or bind by name) to the interfaces of, the Work and Derivative Works thereof.

"Contribution" shall mean any work of authorship, including the original version of the Work and any modifications or additions to that Work or Derivative Works thereof, that is intentionally submitted to Licensor for inclusion in the Work by the copyright owner or by an individual or Legal Entity authorized to submit on behalf of the copyright owner. For the purposes of this definition, "submitted" means any form of electronic, verbal, or written communication sent to the Licensor or its representatives, including but not limited to communication on electronic mailing lists, source code control systems, and issue tracking systems that are managed by, or on behalf of, the Licensor for the purpose of discussing and improving the Work, but excluding communication that is conspicuously marked or otherwise designated in writing by the copyright owner as "Not a Contribution."

"Contributor" shall mean Licensor and any individual or Legal Entity on behalf of whom a Contribution has been received by Licensor and subsequently incorporated within the Work.

2. Grant of Copyright License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable copyright license to reproduce, prepare Derivative Works of, publicly display, publicly perform, sublicense, and distribute the Work and such Derivative Works in Source or Object form.

3. Grant of Patent License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable (except as stated in this section) patent license to make, have made, use, offer to sell, sell, import, and otherwise transfer the Work, where such license applies only to those patent claims licensable by such Contributor that are necessarily infringed by their Contribution(s) alone or by combination of their Contribution(s)



with the Work to which such Contribution(s) was submitted. If You institute patent litigation against any entity (including a cross-claim or counterclaim in a lawsuit) alleging that the Work or a Contribution incorporated within the Work constitutes direct or contributory patent infringement, then any patent licenses granted to You under this License for that Work shall terminate as of the date such litigation is filed.

4. Redistribution. You may reproduce and distribute copies of the Work or Derivative Works thereof in any medium, with or without modifications, and in Source or Object form, provided that You meet the following conditions:

- (a) You must give any other recipients of the Work or Derivative Works a copy of this License; and
- (b) You must cause any modified files to carry prominent notices stating that You changed the files; and
- (c) You must retain, in the Source form of any Derivative Works that You distribute, all copyright, patent, trademark, and attribution notices from the Source form of the Work, excluding those notices that do not pertain to any part of the Derivative Works; and
- (d) If the Work includes a "NOTICE" text file as part of its distribution, then any Derivative Works that You distribute must include a readable copy of the attribution notices contained within such NOTICE file, excluding

those notices that do not

pertain to any part of the Derivative Works, in at least one of the following places: within a NOTICE text file distributed as part of the Derivative Works; within the Source form or documentation, if provided along with the Derivative Works; or, within a display generated by the Derivative Works, if and wherever such third-party notices normally appear. The contents of the NOTICE file are for informational purposes only and do not modify the License. You may add Your own attribution notices within Derivative Works that You distribute, alongside or as an addendum to the NOTICE text from the Work, provided that such additional attribution notices cannot be construed as modifying the License.

You may add Your own copyright statement to Your modifications and may provide additional or different license terms and conditions

for use, reproduction, or distribution of Your modifications, or for any such Derivative Works as a whole, provided Your use, reproduction, and distribution of the Work otherwise complies with the conditions stated in this License.

5. Submission of Contributions. Unless You explicitly state otherwise, any Contribution intentionally submitted for inclusion in the Work by You to the Licensor shall be under the terms and conditions of this License, without any additional terms or conditions.

Notwithstanding the above, nothing herein shall supersede or modify the terms of any separate license agreement you may have executed with Licensor regarding such Contributions.

6. Trademarks. This License does not grant permission to use the trade names, trademarks, service marks, or product names of the Licensor, except as required for reasonable and customary use in describing the origin of the Work and reproducing the content of the NOTICE file.

7. Disclaimer of Warranty. Unless required by applicable law or agreed to in writing, Licensor provides the Work (and each Contributor provides its Contributions) on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied, including, without limitation, any warranties or conditions of TITLE, NON-INFRINGEMENT, MERCHANTABILITY, or FITNESS FOR A PARTICULAR PURPOSE. You are solely responsible for determining the appropriateness of using or redistributing the Work and assume any risks associated with Your exercise of permissions under this License.

8. Limitation of Liability. In no event and under no legal theory, whether in tort (including negligence), contract, or otherwise, unless required by applicable law (such as deliberate and grossly negligent acts) or agreed to in writing, shall any Contributor be liable to You for damages, including any direct, indirect, special, incidental, or consequential damages of any character arising as a result of this License or out of the use or inability to use the Work (including but not limited to damages for loss of goodwill, work stoppage, computer failure or malfunction, or any and all other commercial damages or losses), even if such Contributor has been advised of the possibility of such damages.

9. Accepting Warranty or Additional Liability. While redistributing the Work or Derivative Works thereof, You may choose to offer, and charge a fee for, acceptance of support, warranty, indemnity, or other liability obligations and/or rights consistent with this License. However, in accepting such obligations, You may act only on Your own behalf and on Your sole responsibility, not on behalf

of any other Contributor, and only if You agree to indemnify, defend, and hold each Contributor harmless for any liability incurred by, or claims asserted against, such Contributor by reason of your accepting any such warranty or additional liability.

## END OF TERMS AND CONDITIONS

### APPENDIX: How to apply the Apache License to your work.

To apply the Apache License to your work, attach the following boilerplate notice, with the fields enclosed by brackets "[ ]" replaced with your own identifying information. (Don't include the brackets!) The text should be enclosed in the appropriate comment syntax for the file format. We also recommend that a file or class name and description of purpose be included on the same "printed page" as the copyright notice for easier identification within third-party archives.

Copyright [2007] Neal Norwitz  
Portions Copyright [2007] Google Inc.

Licensed under the Apache License, Version 2.0 (the "License");  
you may not use this file except in compliance with the License.  
You may obtain a copy of the  
License at

<http://www.apache.org/licenses/LICENSE-2.0>

Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License.

# This file contains a list of people who've made non-trivial  
# contribution to the Google C++ Mocking Framework project. People  
# who commit code to the project are encouraged to add their names  
# here. Please keep the list sorted by first names.

Benoit Sigoure <tsuna@google.com>  
Bogdan Piloa <boo@google.com>  
Chandler Carruth <chandlerc@google.com>  
Dave MacLachlan <dmaclach@gmail.com>  
David Anderson <danderson@google.com>  
Dean Sturtevant  
Gene Volovich <gv@cite.com>  
Hal Burch <gmock@hburch.com>  
Jeffrey Yasskin <jyasskin@google.com>  
Jim Keller <jimkeller@google.com>

Joe Walnes <joe@truemesh.com>  
Jon Wray <jwray@google.com>  
Keir Mierle <mierle@gmail.com>  
Keith Ray <keith.ray@gmail.com>  
Kostya Serebryany <kcc@google.com>  
Lev Makhlis  
Manuel Klimek <klimek@google.com>  
Mario Tanev <radix@google.com>  
Mark Paskin  
Markus Heule <markus.heule@gmail.com>  
Matthew Simmons <simmonmt@acm.org>  
Mike Bland <mbland@google.com>  
Neal Norwitz <nnorwitz@gmail.com>  
Nermin Ozkiranartli <nermin@google.com>  
Owen  
Carlsen <ocarlsen@google.com>  
Paneendra Ba <paneendra@google.com>  
Paul Menage <menage@google.com>  
Piotr Kaminski <piotrk@google.com>  
Russ Rufer <russ@pentad.com>  
Sverre Sundsdal <sundsald@gmail.com>  
Takeshi Yoshino <tyoshino@google.com>  
Vadim Berman <vadimb@google.com>  
Vlad Losev <vladl@google.com>  
Wolfgang Klier <wklier@google.com>  
Zhanyong Wan <wan@google.com>  
Copyright (c) 2015, NATTools  
All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- \* Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
- \* Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT HOLDER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES;

LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY,

OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

# This file contains a list of people who've made non-trivial  
# contribution to the Google C++ Testing Framework project. People  
# who commit code to the project are encouraged to add their names  
# here. Please keep the list sorted by first names.

Ajay Joshi <jaj@google.com>  
Balzs Dn <balazs.dan@gmail.com>  
Bharat Mediratta <bharat@menalto.com>  
Chandler Carruth <chandlerc@google.com>  
Chris Prince <cprince@google.com>  
Chris Taylor <taylorc@google.com>  
Dan Egnor <egnor@google.com>  
Eric Roman <eroman@chromium.org>  
Hady Zalek <hady.zalek@gmail.com>  
Jeffrey Yasskin <jyasskin@google.com>  
Ji Sigursson <joi@google.com>  
Keir Mierle <mierle@gmail.com>  
Keith Ray <keith.ray@gmail.com>  
Kenton Varda <kenton@google.com>  
Manuel Klimek <klimek@google.com>  
Markus Heule <markus.heule@gmail.com>  
Mika Raento <mikie@iki.fi>  
Mikls Fazekas <mfazekas@szemafor.com>  
Pasi Valminen <pasi.valminen@gmail.com>  
Patrick Hanna <phanna@google.com>  
Patrick Riley <pfr@google.com>  
Peter Kaminski <piotrk@google.com>  
Preston  
Jackson <preston.a.jackson@gmail.com>  
Rainer Klaffenboeck <rainer.klaffenboeck@dynatrace.com>  
Russ Cox <rsc@google.com>  
Russ Rufer <russ@pentad.com>  
Sean McAfee <eefacm@gmail.com>  
Sigurur sgeirsson <siggi@google.com>  
Tracy Bialik <tracy@pentad.com>  
Vadim Berman <vadimb@google.com>  
Vlad Losev <vladl@google.com>  
Zhanyong Wan <wan@google.com>

## 1.36 curl 8.5.0

### 1.36.1 Available under license :

COPYRIGHT AND PERMISSION NOTICE

Copyright (c) 1996 - 2023, Daniel Stenberg, <daniel@haxx.se>, and many

contributors, see the THANKS file.

All rights reserved.

Permission to use, copy, modify, and distribute this software for any purpose with or without fee is hereby granted, provided that the above copyright notice and this permission notice appear in all copies.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT OF THIRD PARTY RIGHTS. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

Except as contained in this notice, the name of a copyright holder shall not be used in advertising or otherwise to promote the sale, use or other dealings in this Software without prior written authorization of the copyright holder.

## 1.37 bcpkix-fips 1.77

### 1.37.1 Available under license :

No license file was found, but licenses were detected in source scan.

```
<html>
<body bgcolor=#ffffff>
```

Copyright (c) 2000-2023 The Legion of the Bouncy Castle Inc. (<https://www.bouncycastle.org>)

```
<p>
```

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

```
<p>
```

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

```
<p>
```

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR

OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

</body>  
</html>

Found in path(s):

\* /opt/cola/permits/1888827881\_1711357236.7377977/0/bcpkix-jdk18on-177-tar-gz/bcpkix-jdk18on-177/LICENSE.html

No license file was found, but licenses were detected in source scan.

<html>  
<head>  
<title>Bouncy Castle Crypto Package</title>  
</head>

<body bgcolor="#ffffff" text="#000000#">

<center>  
<h1>Bouncy Castle Crypto Package</h1>  
<font size=1>  
<pre>  
</pre>  
</font>  
</center>

<h2>1.0 Introduction</h2>

The Bouncy Castle Crypto package is a Java implementation of cryptographic algorithms. The package is organised so that it contains a light-weight API suitable for use in any environment (including the newly released J2ME) with the additional infrastructure to conform the algorithms to the JCE framework.

<p>

Except where otherwise stated, this software is distributed under a license based on the MIT X

Consortium license. To view the license, see <a href="/LICENSE.html">here</a>.

The OpenPGP library also includes a modified BZIP2 library which is licensed under the <a href="https://www.apache.org/licenses/">Apache Software License, Version 2.0</a>.

<p>

If you have the full package you will have six jar files, bcprov\*.jar which contains the BC provider, jce-\*.jar which contains the JCE provider, clean room API, and bcpkix\*.jar which contains the mail API.

<p>

Note: if you are using JDK 1.0, you will just find a class hierarchy in the classes directory.

<p>

To view examples, look at the test programs in the packages:

- `org.bouncycastle.crypto.test`
- `org.bouncycastle.jce.provider.test`

To verify the packages, run the following Java programs with the appropriate classpath:

- `java org.bouncycastle.crypto.test.RegressionTest`
- `java org.bouncycastle.jce.provider.test.RegressionTest`

## 2.0 Patents

Some of the algorithms in the Bouncy Castle APIs are patented in some places. It is upon the user of the library to be aware of what the legal situation is in their own situation, however we have been asked to specifically mention the patents below, in the following terms, at the request of the patent holder.

The

BC distribution contains implementations of EC MQV as described in RFC 5753, "Use of ECC Algorithms in CMS". In line with the conditions in:

<https://www.ietf.org/ietf-ftp/IPR/certicom-ipr-rfc-5753.pdf>

We state, where EC MQV has not otherwise been disabled or removed:

"The use of this product or service is subject to the reasonable, non-discriminatory terms in the Intellectual Property Rights (IPR) Disclosures of Certicom Corp. at the IETF for Use of Elliptic Curve Cryptography (ECC) Algorithms in Cryptographic Message Syntax (CMS) implemented in the product or service."

## 3.0 System Properties

The Bouncy Castle provider can make use of the following two system properties:

- `org.bouncycastle.ec.disable_mqv` - setting this property to true will disable support for EC MQV in the provider.
- `org.bouncycastle.pkcs1.not_strict` - some other providers of cryptography services fail to produce PKCS1 encoded block that are the correct length. Setting this property to true will relax the conformance check on the block length.

## 4.0 Specifications



- <li> clean room implementation of the JCE API </li>
- <li> light-weight cryptographic API consisting of support for
  - <li>BlockCipher</li>
  - <li>BufferedBlockCipher</li>
  - <li>AsymmetricBlockCipher</li>
  - <li>BufferedAsymmetricBlockCipher</li>
  - <li>StreamCipher</li>
  - <li>BufferedStreamCipher</li>
  - <li>KeyAgreement</li>
  - <li>IESCipher</li>
  - <li>Digest</li>
  - <li>Mac</li>
  - <li>PBE</li>
  - <li>Signers</li>
- <li> JCE compatible framework for a Bouncy Castle provider "BC".</li>
- <li> JCE compatible framework for a Bouncy Castle post-quantum provider "BCPQC".</li>

## <h2>5.0 Light-weight API</h2>

<p>

This API has been specifically developed for those circumstances where the rich API and integration requirements of the JCE are not required.

<p>

However as a result, the light-weight API requires more effort and understanding on the part of a developer to initialise and utilise the algorithms.

### <h3>5.1 Example</h3>

<p>To utilise the light-weight API in a program, the fundamentals are as follows;

```
<pre>
```

```
<code>
```

```
/*
```

```
* This will use a supplied key, and encrypt the data
```

```
* This is the equivalent of DES/CBC/PKCS5Padding
```

```
*/
```

```
BlockCipher engine = new DESEngine();
```

```
BufferedBlockCipher cipher = new PaddedBlockCipher(new CBCCipher(engine));
```

```
byte[] key = keyString.getBytes();
```

```
byte[] input = inputString.getBytes();
```

```

cipher.init(true, new KeyParameter(key));

byte[] cipherText = new byte[cipher.getOutputSize(input.length)];

int outputLen = cipher.processBytes(input, 0, input.length, cipherText, 0);
try
{
 cipher.doFinal(cipherText, outputLen);
}
catch (CryptoException ce)
{
 System.err.println(ce);
 System.exit(1);
}
</code>
</pre>

```

### 5.2 Algorithms

The light-weight API has built in support for the following:

#### Symmetric (Block)

The base interface is `BlockCipher` and has the following implementations which match the modes the block cipher can be operated in.

Name	Constructor	Notes
<code>BufferedBlockCipher</code>	<code>BlockCipher</code>	&nbsp;
<code>CBCBlockCipher</code>	<code>BlockCipher</code>	&nbsp;
<code>CFBBlockCipher</code>	<code>BlockCipher</code> , block size (in bits)	&nbsp;
<code>GCFBBlockCipher</code>	<code>BlockCipher</code>	GOST CFB mode with CryptoPro key meshing.
<code>EAXBlockCipher</code>	<code>BlockCipher</code>	&nbsp;
<code>OCBBlockCipher</code>	<code>BlockCipher</code>	&nbsp;
<code>OFBBlockCipher</code>	<code>BlockCipher</code> , block size (in bits)	&nbsp;
<code>SICBlockCipher</code>	<code>BlockCipher</code> , block size (in bits)	Also known as CTR mode
<code>KCTRBlockCipher</code>	<code>BlockCipher</code> , block size (in bits)	DSTU7624 CTR mode
<code>OpenPGPCFBBlockCipher</code>	<code>BlockCipher</code>	&nbsp;
<code>GOFBBlockCipher</code>	<code>BlockCipher</code>	GOST OFB mode

<p>

The base interface for AEAD (Authenticated Encryption Associated Data) modes is <b>AEADBlockCipher</b> and has the following implementations.

<p>

<table cellpadding=5 cellspacing=0 border=1 width=80%>

<tr><th>Name</th><th>Constructor</th><th>Notes</th></tr>

<tr><td><b>CCMBlockCipher</b></td><td>BlockCipher</td><td>Packet mode - requires all data up front.</td></tr>

<tr><td><b>EAXBlockCipher</b></td><td>BlockCipher</td><td>&nbsp;</td></tr>

<tr><td><b>CCMBlockCipher</b></td><td>BlockCipher</td><td>Packet mode - requires all data up front.</td></tr>

<tr><td><b>GCMBlockCipher</b></td><td>BlockCipher</td><td>Packet mode - NIST SP 800-38D.</td></tr>

<tr><td><b>GCMBlockCipher</b></td><td>BlockCipher</td><td>Packet mode - RFC 8452.</td></tr>

<tr><td><b>KCCMBlockCipher</b></td><td>BlockCipher</td><td>DSTU 7624 Packet mode - requires all data up front.</td></tr>

<tr><td><b>OCBBlockCipher</b></td><td>BlockCipher</td><td>&nbsp;</td></tr>

<tr><td><b>ChaCha20Poly1305</b></td><td>AEADCipher</td><td>&nbsp;</td></tr>

</table>

</p>

<p>

<b>BufferedBlockCipher</b> has a further sub-classes

<p>

<table cellpadding=5 cellspacing=0 border=1 width=80%>

<tr><th>Name</th><th>Constructor</th><th>Notes</th></tr>

<tr><td><b>PaddedBufferedBlockCipher</b></td><td>BlockCipher</td><td>a buffered block cipher that can use padding - default PKCS5/7 padding</td></tr>

<tr><td><b>CTSBBlockCipher</b></td><td>BlockCipher</td><td>Cipher Text Stealing</td></tr>

<tr><td><b>NISTCTSBBlockCipher</b></td><td>BlockCipher</td><td>Cipher Text Stealing - NIST mode set.</td></tr>

</table>

<p>The following paddings can be used with the PaddedBufferedBlockCipher.

<p>

<table cellpadding=5 cellspacing=0 border=1 width=80%>

<tr><th>Name</th><th>Description</th></tr>

<tr><td>PKCS7Padding</td><td>PKCS7/PKCS5 padding</td></tr>

<tr><td>ISO10126d2Padding</td><td>ISO 10126-2 padding</td></tr>

<tr><td>X932Padding</td><td>X9.23 padding</td></tr>

<tr><td>ISO7816d4Padding</td><td>ISO 7816-4 padding (ISO 9797-1 scheme 2)</td></tr>

<tr><td>ZeroBytePadding</td><td>Pad with Zeros (not recommended)</td></tr>

</table>

<p>The following cipher engines are implemented that can be used with the above modes.

<p>

Name	Key Sizes (in bits)	Block Size	Notes
<b>AESEngine</b>	0 .. 256	128 bit	&nbsp;
<b>AESWrapEngine</b>	0 .. 256	128 bit	Implements FIPS AES key wrapping
<b>AsconEngine</b>	128	128 bit	AEAD Cipher
<b>BlowfishEngine</b>	0 .. 448	64 bit	&nbsp;
<b>CamelliaEngine</b>	128, 192, 256	128 bit	&nbsp;
<b>CamelliaWrapEngine</b>	128, 192, 256	128 bit	&nbsp;
<b>CAST5Engine</b>	0 .. 128	64 bit	&nbsp;
<b>CAST6Engine</b>	0 .. 256	128 bit	&nbsp;
<b>DESEngine</b>	64	64 bit	&nbsp;
<b>DESedeEngine</b>	128, 192	64 bit	&nbsp;
<b>DESedeWrapEngine</b>	128, 192	64 bit	Implements Draft IETF DESede key wrapping
<b>DSTU7624Engine</b>	128, 256, 512	128/256/512 bit	DSTU7624 Block Cipher
<b>DSTU7624WrapEngine</b>	128, 256, 512	128/256/512 bit	DSTU7624 key wrapper
<b>ElephantEngine</b>	128	128 bit	AEAD Cipher
<b>GOST28147Engine</b>	256	64 bit	Has a range of S-boxes
<b>GOST3412_2015Engine</b>	256	128 bit	&nbsp;
<b>IDEAEngine</b>	128	64 bit	&nbsp;
<b>ISAPEngine</b>	128	128 bit	AEAD Cipher
<b>LEAEngine</b>	128	128/192/256 bit	&nbsp;
<b>NoekeonEngine</b>	128	128 bit	&nbsp;
<b>PhotonBeetleEngine</b>	128	128 bit	AEAD Cipher
<b>RC2Engine</b>	0 .. 1024	64 bit	&nbsp;
<b>RC532Engine</b>	0 .. 128	64 bit	Uses a 32 bit word
<b>RC564Engine</b>	0 .. 128	128 bit	Uses a 64 bit word
<b>RC6Engine</b>	0 .. 256	128 bit	&nbsp;
<b>RijndaelEngine</b>	0 .. 256	128 bit, 160 bit, 192 bit, 224 bit, 256 bit	&nbsp;
<b>SEEDEngine</b>	128	128 bit	&nbsp;
<b>SEEDWrapEngine</b>	128	128 bit	&nbsp;
<b>Shacal2Engine</b>	512	256 bit	&nbsp;
<b>SerpentEngine</b>	128, 192, 256	128 bit	&nbsp;
<b>SkipjackEngine</b>	0 .. 128	64 bit	&nbsp;
<b>SM4Engine</b>	128	128 bit	&nbsp;
<b>SparkleEngine</b>	128	128 bit	AEAD Cipher
<b>TEAEngine</b>	128	64 bit	&nbsp;
<b>ThreefishEngine</b>	256/512/1024	256 bit/512 bit/1024 bit	Tweakable block cipher
<b>TwofishEngine</b>	128, 192, 256	128 bit	&nbsp;
<b>XoodyakEngine</b>	128	128	

bit	AEAD Cipher
<b>XTEAEngine</b>	128 64 bit &nbsp;

The following additional key wrapping algorithms are also available: RFC3211WrapEngine, RFC3394WrapEngine, and RFC5649WrapEngine.

#### Symmetric (Stream)

The base interface is **StreamCipher** and has the following implementations which match the modes the stream cipher can be operated in.

Name	Constructor	Notes
<b>BlockStreamCipher</b>	<b>BlockCipher</b>	&nbsp;

The following cipher engines are implemented that can be used with the above modes.

Name	KeySizes (in bits)	Notes
<b>RC4Engine</b>	40 .. 2048	&nbsp;
<b>HC128Engine</b>	128	&nbsp;
<b>HC256Engine</b>	256	&nbsp;
<b>ChaChaEngine</b>	128/256	64 bit IV
<b>Salsa20Engine</b>	128/256	64 bit IV
<b>XSalsa20Engine</b>	256	192 bit IV
<b>ISAACEngine</b>	32 .. 8192	&nbsp;
<b>VMPCEngine</b>	8 .. 6144	&nbsp;
<b>Grainv1Engine</b>	80	64 bit IV
<b>Grain128Engine</b>	128	96 bit IV
<b>Zuc128Engine</b>	128	128 bit IV
<b>Zuc256Engine</b>	256	200 bit IV

#### Block Asymmetric

The base interface is **AsymmetricBlockCipher** and has the following implementations which match the modes the cipher can be operated in.

Name	KeySizes (in bits)	Notes
------	--------------------	-------

Name	Constructor	Notes
<b>BufferedAsymmetricBlockCipher</b>	AsymmetricBlockCipher	&nbsp;
<b>OAEPEncoding</b>	AsymmetricBlockCipher	&nbsp;
<b>PKCS1Encoding</b>	AsymmetricBlockCipher	&nbsp;
<b>ISO9796d1Encoding</b>	AsymmetricBlockCipher	ISO9796-1

The following cipher engines are implemented that can be used with the above modes.

Name	KeySizes (in bits)	Notes
<b>RSAEngine</b>	any multiple of 8 large enough for the encoding.	&nbsp;
<b>ElGamalEngine</b>	any multiple of 8 large enough for the encoding.	&nbsp;
<b>NTRUEngine</b>	any multiple of 8 large enough for the encoding.	&nbsp;

The following asymmetric ciphers are also supported and allow variable block sizes:

- IESEngine
- SM2Engine

#### Digest

The base interface is **Digest** and has the following implementations

Name	Output (in bits)	Notes
<b>AsconDigest</b>	256	
<b>AsconXof</b>	XOF	
<b>Blake2bDigest</b>	224, 256, 384, 512	
<b>Blake3Digest</b>	224, 256, 384, 512	
<b>CSHAKEDigest</b>	XOF	SP 800-185, based on SHAKE128/SHAKE256
<b>DSTU7564Digest</b>	256, 384, 512	
<b>ISAPDigest</b>	256	
<b>Kangaroo</b>	XOF	Built on Keccak-p
<b>KeccakDigest</b>	224, 256, 288, 384, 512	
<b>MD2Digest</b>	128	&nbsp;
<b>MD4Digest</b>	128	&nbsp;
<b>MD5Digest</b>	128	&nbsp;

<b>ParallelHash</b>	XOF	XOF based on cSHAKE (SP 800-185).
<b>PhotonBeetleDigest</b>	256	
<b>RipeMD128Digest</b>	128	basic RipeMD
<b>RipeMD160Digest</b>	160	enhanced version of RipeMD
<b>RipeMD256Digest</b>	256	expanded version of RipeMD128
<b>RipeMD320Digest</b>	320	expanded version of RipeMD160
<b>SHA1Digest</b>	160	&nbsp;
<b>SHA224Digest</b>	224	FIPS 180-2
<b>SHA256Digest</b>	256	FIPS 180-2
<b>SHA384Digest</b>	384	FIPS 180-2
<b>SHA512Digest</b>	512	FIPS 180-2
<b>SHA3Digest</b>	224, 256, 384, 512	
<b>SHAKEDigest</b>	128, 256	cSHAKE primitive also supported.
<b>SkeinDigest</b>	any byte length	256 bit, 512 bit and 1024 state sizes. Additional parameterisation using SkeinParameters.
<b>SM3Digest</b>	256	The SM3 Digest.
<b>SparkleDigest</b>	256	
<b>TigerDigest</b>	192	The Tiger Digest.
<b>TupleHash</b>	XOF	XOF based on cSHAKE (SP 800-185).
<b>GOST3411Digest</b>	256	The GOST-3411 Digest.
<b>GOST3411_2012_256Digest</b>	256	The GOST-3411-2012-256 Digest.
<b>GOST3411_2012_512Digest</b>	512	The GOST-3411-2012-512 Digest.
<b>WhirlpoolDigest</b>	512	The Whirlpool Digest.
<b>Haraka256Digest</b>	256	Haraka V2 - 256 bit input version.
<b>Haraka512Digest</b>	256	Haraka V2 - 512 bit input version.
<b>XoodyakDigest</b>	256	

#### MAC

<p>

The base interface is **Mac** and has the following implementations

<p>

Name	Output (in bits)	Notes
<b>CBCBlockCipherMac</b>	blocksize/2 unless specified	&nbsp;
<b>CFBBlockCipherMac</b>	blocksize/2, in CFB 8 mode, unless specified	&nbsp;
<b>CMac</b>	24 to cipher block size bits	Usable with block ciphers, NIST SP 800-38B.
<b>GMac</b>	32 to 128 bits	Usable with GCM mode ciphers, defined for AES, NIST SP 800-38D.

<b>GOST28147Mac</b>	32 bits	&nbsp;
<b>ISO9797Alg3Mac</b>	multiple of 8 bits up to underlying cipher size.	&nbsp;
<b>HMac</b>	digest length	&nbsp;
<b>DSTU7564</b>	256, 384, 512 bits	&nbsp;
<b>DSTU7624</b>	128, 256, 512 bits	&nbsp;
<b>Poly1305</b>	128 bits	Usable with 128 bit block ciphers. Use Poly1305KeyGenerator to generate keys.
<b>SkeinMac</b>	any byte length	256 bit, 512 bit and 1024 state size variants. Additional parameterisation using SkeinParameters.
<b>SipHash</b>	64 bits	&nbsp;
<b>SipHash128</b>	128 bits	&nbsp;
<b>VMPCMac</b>	160 bits	&nbsp;
<b>Zuc128Mac</b>	32 bits	&nbsp;
<b>Zuc256Mac</b>	32, 64, 128 bits	&nbsp;

#### PBE and Password Hashing

The base class is **PBParametersGenerator** and has the following sub-classes

table

cellpadding=5 cellspacing=0 border=1 width=80%

Name	Constructor	Notes
<b>PKCS5S1ParametersGenerator</b>	Digest	&nbsp;
<b>PKCS5S2ParametersGenerator</b>	&nbsp;	Uses SHA1/Hmac as defined
<b>PKCS12ParametersGenerator</b>	Digest	&nbsp;
<b>OpenSSLPBParametersGenerator</b>	&nbsp;	Uses MD5 as defined

The following password hashing schemes are supported:

table cellpadding=5 cellspacing=0 border=1 width=80%

Name	Constructor	Notes
<b>Argon2</b>	&nbsp;	&nbsp;
<b>BCrypt</b>	&nbsp;	&nbsp;
<b>OpenBSDBcrypt</b>	&nbsp;	&nbsp;
<b>SCrypt</b>	&nbsp;	&nbsp;

#### IESCipher

The IES cipher is based on the one described

in IEEE P1363a (draft 10), for

use with either traditional Diffie-Hellman or Elliptic Curve Diffie-Hellman.



</p>

<b>Note:</b> At the moment this is still a draft, don't use it for anything that may be subject to long term storage, the key values produced may well change as the draft is finalised.

</p>

#### <h4>Commitments</h4>

<p>

The base class is <b>Committer</b> and has the following sub-classes

</p>

<table cellpadding=5 cellspacing=0 border=1 width=80%>

<tr><th>Name</th><th>Notes</th></tr>

<tr><td><b>HashCommitter</b></td><td>Hash commitment algorithm described in Usenix RPC MixNet Paper (2002)</td></tr>

</table>

#### <h4>Key Agreement</h4>

<p>

Two versions of Diffie-Hellman key agreement are supported, the basic version, and one for use with long term public keys. Two versions of key agreement using Elliptic Curve cryptography are also supported, standard Diffie-Hellman key agreement and standard key agreement with co-factors.

</p>

<p>

The agreement APIs are in the <b>org.bouncycastle.crypto.agreement</b> package.

Classes for generating Diffie-Hellman parameters can be found in the

<b>org.bouncycastle.crypto.params</b> and <b>org.bouncycastle.crypto.generators</b> packages.

</p>

#### <h4>Key Encapsulation Mechanisms</h4>

<p>

The first non-post-quantum set use the <b>EncapsulatedSecretGenerator</b> and <b>EncapsulatedSecretGenerator</b> interfaces.

</p>

<table cellpadding=5 cellspacing=0 border=1 width=80%>

<thead>

<tr><th>Name</th><th>Notes</th></tr>

</thead>

<tbody>

<tr><td><b>RSA</b></td><td>RSA-KEM from ISO 18033-2, implemented in <b>RSAKEMExtractor</b> and <b>RSAKEMGenerator</b></td></tr>

<tr><td><b>ECIES</b></td><td>ECIES-KEM from ISO 18033-2, implemented in <b>ECIESKEMExtractor</b> and <b>ECIESKEMGenerator</b></td></tr>

</tbody>

</table>

<p>

The second, post-quantum set use <b>EncapsulatedSecretGenerator</b> and <b>EncapsulatedSecretGenerator</b>.

</p>

<table cellpadding=5 cellspacing=0 border=1 width=80%>

<tbody>

<tr><th>Name</th><th>Security Strength (in bits)</th><th>Implementations</th><th>Notes</th></tr>

<tr><td><b>BIKE</b></td><td>128-256.</td><td><b>BIKEKEMGenerator</b>,<br><b>BIKEKEMExtractor</b></td><td>Round&nbsp;4</td></tr>

<tr><td><b>Classic McEliece</b></td><td>128-256.</td><td><b>CMCEKEMGenerator</b>,<br><b>CMCEKEMExtractor</b></td><td>Round&nbsp;4</td></tr>

<tr><td><b>FrodoKEM</b></td><td>128-256.</td><td><b>FrodoKEMGenerator</b>,<br><b>FrodoKEMExtractor</b></td><td></td></tr>

<tr><td><b>HQC</b></td><td>128-256.</td><td><b>HQCKEMGenerator</b>,<br><b>HQCKEMExtractor</b></td><td>Round&nbsp;4</td></tr>

<tr><td><b>Kyber</b></td><td>128-256.</td><td><b>KyberKEMGenerator</b>,<br><b>KyberKEMExtractor</b></td><td>Finalist</td></tr>

<tr><td><b>NTRU</b></td><td>128-256.</td><td><b>NTRUKEMGenerator</b>,<br><b>NTRUKEMExtractor</b></td><td></td></tr>

<tr><td><b>NTRU Prime</b></td><td>128-256.</td><td><b>NTRULPrimeKEMGenerator</b>,<br><b>NTRULPrimeKEMExtractor</b> <br /> <b>SNTRUPrimeKEMGenerator</b>,<br><b>SNTRUPrimeKEMExtractor</b></td><td></td></tr>

<tr><td><b>SABER</b></td><td>128-256.</td><td><b>SABERKEMGenerator</b>,<br><b>SABERKEMExtractor</b></td><td></td></tr>

</tbody>

</table>

</p>

#### <h4>Signers</h4>

<p>

DSA, ECDSA, ISO-9796-2, GOST-3410-94, GOST-3410-2001, GOST-3410-2012, DSTU-4145-2002, and RSA-PSS are supported by the <b>org.bouncycastle.crypto.signers</b>

package. Note: as these are light weight classes, if you need to use SHA1 or GOST-3411

(as defined in the relevant standards) you'll also need to make use of the appropriate digest class in conjunction with these.

Classes for generating DSA and ECDSA parameters can be found in the

<b>org.bouncycastle.crypto.params</b> and <b>org.bouncycastle.crypto.generators</b> packages.

<p>

### <h3>5.4 Elliptic Curve Transforms.</h3>

<p>

The org.bouncycastle.crypto.ec package contains implementations for a variety of EC cryptographic transforms such as EC ElGamal.

</p>

### <h3>5.5 TLS/DTLS</h3>

<p>

The org.bouncycastle.crypto.tls package contains implementations for TLS 1.1, 1.2 and DTLS 1.0, 1.2.

</p>

### <h3>5.6

Deterministic Random Bit Generators (DRBG) and SecureRandom wrappers</h3>

<p>

The org.bouncycastle.crypto.prng package contains implementations for a variety of bit generators including those from SP 800-90A and X9.31, as well as builders for SecureRandom objects based around them.

</p>

### <h3>5.7 ASN.1 package</h3>

<p>The light-weight API has direct interfaces into a package capable of reading and writing DER-encoded ASN.1 objects and for the generation of X.509 V3 certificate objects and PKCS12 files. BER InputStream and OutputStream classes are provided as well.

## <h2>6.0 Bouncy Castle Provider</h2>

<p>The Bouncy Castle provider is a JCE compliant provider that is a wrapper built on top of the light-weight API. The main provider is referred to with the name "BC", the post quantum provider is indicated by "BCPQC".</p>

<p>

The advantage for writing application code that uses the provider interface to cryptographic algorithms is that the actual provider used can be selected at run time. This

is extremely valuable for applications that may wish to make use of a provider that has underlying hardware for cryptographic computation, or where an application may have been developed in an environment with cryptographic export controls.

</p>

### <h3>6.1 Example</h3>

<p>To utilise the JCE provider in a program, the fundamentals are as follows;

<pre>

<code>

/\*

\* This will generate a random key, and encrypt the data

\*/

Key key;

KeyGenerator keyGen;

Cipher encrypt;

```
Security.addProvider(new BouncyCastleProvider());

try
{
 // "BC" is the name of the BouncyCastle provider
 keyGen = KeyGenerator.getInstance("DES", "BC");
 keyGen.init(new SecureRandom());

 key = keyGen.generateKey();

 encrypt = Cipher.getInstance("DES/CBC/PKCS5Padding", "BC");
}
catch (Exception e)
{
 System.err.println(e);
 System.exit(1);
}

encrypt.init(Cipher.ENCRYPT_MODE, key);

bOut = new ByteArrayOutputStream();
cOut = new CipherOutputStream(bOut, encrypt);

cOut.write("plaintext".getBytes());
cOut.close();
```

```
//
bOut now contains the cipher text
```

</code>

</pre>

<p>

The provider can also be configured as part of your environment via static registration by adding an entry to the java.security properties file (found in \$JAVA\_HOME/jre/lib/security/java.security, where \$JAVA\_HOME is the location of your JDK/JRE distribution). You'll find detailed instructions in the file but basically it comes down to adding a line:

<pre>

<code>

```
security.provider.<n>=org.bouncycastle.jce.provider.BouncyCastleProvider
```

</code>

</pre>

<p>Where &lt;n&gt; is the preference you want the provider at (1 being the most preferred).

<p>Where you put the jar is up to mostly up to you, although with jdk1.3 and

jdk1.4 the best (and in some cases only) place to have it is in \$JAVA\_HOME/jre/lib/ext. Note: under Windows there will normally be a JRE and a JDK install of Java if you think you have installed it correctly and it still doesn't work chances are you have added the provider

to the installation not being used.

<p>

<b>Note</b>: with JDK 1.4 and later you will need to have installed the unrestricted policy files to take full advantage of the provider. If you do not install the policy files you are likely to get something like the following:

<b>

<pre>

```
java.lang.SecurityException: Unsupported keysize or algorithm parameters
 at javax.crypto.Cipher.init(DashoA6275)
```

</pre>

</b>

The policy files can be found at the same place you downloaded the JDK.

<p>

### <h3>6.2 Algorithms</h3>

#### <h4>Symmetric (Block)</h4>

<p>Modes:

<ul>

<li>ECB</li>

<li>CBC</li>

<li>OFB(n)</li>

<li>CFB(n)</li>

<li>SIC (also known as CTR)</li>

<li>OpenPGPCFB</li>

<li>CTS (equivalent to CBC/WithCTS)</li>

<li>FF1</li>

<li>FF3-1</li>

<li>GOFB</li>

<li>GCFB</li>

<li>CCM (AEAD)</li>

<li>EAX (AEAD)</li>

<li>GCM (AEAD)</li>

<li>GCM-SIV (AEAD)</li>

<li>OCB (AEAD)</li>

</ul>

<p>

Where <i>(n)</i> is a multiple of 8 that gives the blocksize in bits,

eg, OFB8. Note that OFB and CFB

mode can be used with plain text that

is not an exact multiple of the block size if NoPadding has been specified.

<p>

All <i>AEAD</i> (Authenticated Encryption Associated Data) modes support Additional Authentication Data (AAD) using the <code>Cipher.updateAAD()</code> methods added in Java SE 7. <br>

On Java 7 and later, AEAD modes will throw <code>javax.crypto.AEADBadTagException</code> on an authentication failure.

On earlier version of Java, `javax.crypto.BadPaddingException` is thrown.

Padding Schemes:

- 

- No padding

- PKCS5/7

- ISO10126/ISO10126-2

- ISO7816-4/ISO9797-1

- X9.23/X923

- TBC

- ZeroByte

- withCTS (if used with ECB mode)



When placed together this gives a specification for an algorithm

as;

- 

- DES/CBC/X9.23Padding

- DES/OFB8/NoPadding

- IDEA/CBC/ISO10126Padding

- IDEA/CBC/ISO7816-4Padding

- SKIPJACK/ECB/PKCS7Padding

- DES/ECB/WithCTS



Note: default key sizes are in bold.

Name	Key Sizes (in bits)	Block Size	Notes
AES	0 .. 256 <b>(192)</b>	128 bit	
AESWrap	0 .. 256 <b>(192)</b>	128 bit	A FIPS AES key wrapper
ARIA	0 .. 256 <b>(192)</b>	128 bit	
ARIAWrap	0 .. 256 <b>(192)</b>	128 bit	An ARIA key wrapper (based on RFC 5649)
Blowfish	0 .. 448 <b>(448)</b>	64 bit	
Camellia	128, 192, 256	128 bit	
CamelliaWrap	128, 192, 256	128 bit	
CAST5	0 .. 128 <b>(128)</b>	64 bit	
CAST6	0 .. 256 <b>(256)</b>	128 bit	
DES	64	64 bit	
DESede	128, 192	64 bit	
DESedeWrap	128, 192	128 bit	A Draft IETF DESede key wrapper

DSTU7624	128, 256, 512	128/256/512 bit	DSTU7624 Block Cipher
DSTU7624Wrap	128, 256, 512	128/256/512 bit	DSTU7624 key wrapper
GCM	128, 192, 256	<b>(192)</b>	AEAD Mode Cipher Galois/Counter Mode, as defined in NIST Special Publication SP 800-38D.
GOST28147	256	64 bit	&nbsp;
IDEA	128	<b>(128)</b>	64 bit &nbsp;
Noekeon	128	<b>(128)</b>	128 bit &nbsp;
RC2	0 .. 1024	<b>(128)</b>	64 bit &nbsp;
RC5	0 .. 128	<b>(128)</b>	64 bit Uses a 32 bit word
RC5-64	0 .. 256	<b>(256)</b>	128 bit Uses a 64 bit word
RC6	0 .. 256	<b>(128)</b>	128 bit &nbsp;
Rijndael	0 .. 256	<b>(192)</b>	128 bit &nbsp;
SEED	128	<b>(128)</b>	128 bit &nbsp;
SEEDWrap	128	<b>(128)</b>	128 bit &nbsp;
Serpent	128, 192, 256	<b>(256)</b>	128 bit &nbsp;
Skipjack	0 .. 128	<b>(128)</b>	64 bit &nbsp;
SM4	128	<b>(128)</b>	128 bit &nbsp;
TEA	128	<b>(128)</b>	64 bit &nbsp;
Threefish-256	256	256 bit	&nbsp;
Threefish-512	512	512 bit	&nbsp;
Threefish-1024	1024	1024 bit	&nbsp;
Twofish	128, 192, 256	<b>(256)</b>	128 bit &nbsp;
XTEA	128	<b>(128)</b>	64 bit &nbsp;

#### Symmetric (Stream)

<p>

Note: default key sizes are in bold.

<p>

Name	KeySizes (in bits)	Notes
RC4	40 .. 2048 bits	<b>(128)</b> &nbsp;
HC128	(128)	&nbsp;
HC256	(256)	&nbsp;
ChaCha	<b>128</b> /256	64 bit IV
Salsa20	<b>128</b> /256	64 bit IV
XSalsa20	256	182 bit IV
VMPC	128/6144	<b>(128)</b> &nbsp;
Grainv1	<b>80</b>	64 bit IV
Grain128	<b>128</b>	96 bit IV
Grain128AEAD	<b>128</b>	96 bit IV
Zuc128	<b>128</b>	128 bit IV
Zuc256	<b>256</b>	200

bit IV

#### Block Asymmetric

Encoding:

- 

- OAEP - Optimal Asymmetric Encryption Padding

- PKCS1 - PKCS v1.5 Padding

- ISO9796-1 - ISO9796-1 edition 1 Padding



Note: except as indicated in PKCS 1v2 we recommend you use OAEP, as mandated in X9.44.

When placed together with RSA this gives a specification for an algorithm as;

- 

- RSA/NONE/NoPadding

- RSA/NONE/PKCS1Padding

- RSA/NONE/OAEPWithMD5AndMGF1Padding

- RSA/NONE/OAEPWithSHA1AndMGF1Padding

- RSA/NONE/OAEPWithSHA224AndMGF1Padding

- RSA/NONE/OAEPWithSHA256AndMGF1Padding

- RSA/NONE/OAEPWithSHA384AndMGF1Padding

- RSA/NONE/OAEPWithSHA512AndMGF1Padding

- RSA/NONE/OAEPWithSHA3-224AndMGF1Padding

- RSA/NONE/OAEPWithSHA3-256AndMGF1Padding

- RSA/NONE/OAEPWithSHA3-384AndMGF1Padding

- RSA/NONE/OAEPWithSHA3-512AndMGF1Padding

- RSA/NONE/ISO9796-1Padding



Name	Key Sizes
RSA	any multiple of 8 bits large enough for the encryption <b>(2048)</b>
ElGamal	any multiple of 8 bits large enough for the encryption <b>(1024)</b>

#### Key Agreement

Diffie-Hellman key agreement is supported using the "DH", "DHU" (Diffie-Hellman Unified), "ECDH", "ECCDH" (EC Cofactor DH), "ECKAEG" (BSI EC KAEG key agreement), "ECMQV" and "ECCDHU" (EC Cofactor DH Unified) key agreement instances and their variations. Key exchange, which also uses the



KeyAgreement API is supported by "NH" (the NewHope algorithm (BCPQC)). SM2 key exchange is currently supported in the lightweight API.

</p>

<p>

Support is provided for the standard SEC algorithm set for EC. Names appear in the form of [Agreement]with[KDF PRF Digest][KDF type]. For example:

<ul>

<li>"ECCDHwithSHA256KDF" which represents EC cofactor DH using the X9.63 KDF with SHA256 as the PRF</li>

<li>"ECMQVwithSHA1CKDF"

which represents EC MQV using the concatenation KDF with SHA1 as the PRF</li>

</ul>

</p><p>

Note: with basic "DH" only the basic algorithm fits in with the JCE API, if you're using long-term public keys you may want to look at the light-weight API, there are also additional JCE support classes for UserKeyingMaterial and MQVParameters in the <b>org.bouncycastle.jcajce.spec</b> package.

</p>

<h4>Key Encapsulation Mechanisms</h4>

<table cellpadding=5 cellspacing=0 border=1 width=80%>

<thead>

<tr><th>Name</th><th>ParameterSpec Class</th><th>Notes</th></tr>

</thead>

<tbody>

<tr><td><b>CMCE</b></td><td>CMCEParameterSpec</td><td>Class McEliece (NIST Alternate Candidate)</td></tr>

<tr><td><b>Frodo</b></td><td>FrodoParameterSpec</td><td>FrodoKEM (NIST Alternate Candidate)</td></tr>

<tr><td><b>SABER</b></td><td>SABERParameterSpec</td><td>SABER (NIST Finalist)</td></tr>

</tbody>

</table>

<p>

If used for key wrapping via the Cipher class, you will also need to make use of the KEMParameterSpec class to specify a symmetric wrapping algorithm.

</p>

<p>

If access to the shared secret is required, KeyGenerator implementations can also be used in conjunction with the KEMGenerateSpec and the KEMExtractSpec which return the shared secret directly.

</p>

<h4>ECIES</h4>

<p>

An implementation of ECIES (stream mode) as described in IEEE P 1363a. This now based more formally on Victor Shoup's paper and should be compatible with the implementation in Crypto++ (version 6 onwards).

</p>

<h4>Digest</h4>

<p>

<table cellpadding=5 cellspacing=0 border=1 width=80%>

<tr><th>Name</th><th>Output (in bits)</th><th>Notes</th></tr>

Blake2b-160	160	&nbsp;
Blake2b-256	256	&nbsp;
Blake2b-384	384	&nbsp;
Blake2b-512	512	&nbsp;
Blake2s-128	128	&nbsp;
Blake2s-160	160	&nbsp;
Blake2s-224	224	&nbsp;
Blake2s-256	256	&nbsp;
Blake3-256	256	&nbsp;
DSTU7564-256	256	&nbsp;
DSTU7564-384	384	&nbsp;
DSTU7564-512	512	&nbsp;
GOST3411	256	&nbsp;
GOST3411-2012-256	256	&nbsp;
GOST3411-2012-512	512	&nbsp;
Haraka-256	256	&nbsp;
Haraka-512	256	&nbsp;
Keccak-224	224	&nbsp;
Keccak-288	288	&nbsp;
Keccak-256	256	&nbsp;
Keccak-384	384	&nbsp;
Keccak-512	512	&nbsp;
MD2	128	&nbsp;
MD4	128	&nbsp;
MD5	128	&nbsp;
RipeMD128	128	basic
RipeMD		
RipeMD160	160	enhanced version of RipeMD
RipeMD256	256	expanded version of RipeMD128
RipeMD320	320	expanded version of RipeMD160
SHA1	160	&nbsp;
SHA-224	224	FIPS 180-2
SHA-256	256	FIPS 180-2
SHA-384	384	FIPS 180-2
SHA-512	512	FIPS 180-2
SHA3-224	224	FIPS 202
SHA3-256	256	FIPS 202
SHA3-384	384	FIPS 202
SHA3-512	512	FIPS 202
Skein-256-*	128, 160, 224, 256	e.g. Skein-256-160
Skein-512-*	128, 160, 224, 256, 384, 512	e.g. Skein-512-256
Skein-1024-*	384, 512, 1024	e.g. Skein-1024-1024
SM3	256	&nbsp;
Tiger	192	&nbsp;
Whirlpool	512	&nbsp;

</p>

#### MAC

Name	Output (in bits)	Notes
Any MAC based on a block cipher, CBC (the default) and CFB modes.	half the cipher's block size (usually 32 bits)	
*-GMAC	32 to 128 bits	Usable with GCM mode ciphers, defined for AES, NIST SP 800-38D. e.g. AES-GMAC.
VMPC-MAC	128	
HMac-GOST3411	256	
HMac-GOST3411-2012-256	256	
HMac-GOST3411-2012-512	512	
HMac-KECCAK224	224	
HMac-KECCAK256	256	
HMac-KECCAK288	288	
HMac-KECCAK384	384	
HMac-KECCAK512	512	
HMac-MD2	128	
HMac-MD4	128	
HMac-MD5	128	
HMac-RipeMD128	128	
HMac-RipeMD160	160	
HMac-SHA1	160	
HMac-SHA224	224	
HMac-SHA256	256	
HMac-SHA384	384	
HMac-SHA512	512	
HMac-SHA3-224	224	
HMac-SHA3-256	256	
HMac-SHA3-384	384	
HMac-SHA3-512	512	
HMAC-Skein-256-*	128, 160, 224, 256	e.g. HMAC-Skein-256-160
HMAC-Skein-512-*	128, 160, 224, 256, 384, 512	e.g. HMAC-Skein-512-256
HMAC-Skein-1024-*	384, 512, 1024	e.g. HMAC-Skein-1024-1024
Siphash-2-4 (SipHash)	64	
Siphash-4-8	64	
Siphash128-2-4 (SipHash128)	128	
Skein-MAC-256-*	128, 160, 224, 256	e.g. Skein-MAC-256-160
Skein-MAC-512-*	128, 160, 224, 256, 384, 512	e.g. Skein-MAC-512-256
Skein-MAC-1024-*	384, 512, 1024	e.g. Skein-MAC-1024-1024
HMac-Tiger	192	
Poly1305-*	128	Defined for recent 128 bit block ciphers, e.g. Poly1305-AES, Poly1305-Serpent
ZUC-128	32	
ZUC-256-32	32	
ZUC-256-64	64	

<tr><td>ZUC-256-128</td><td>128</td><td></td></tr>  
</table>

<p>Examples:

<ul>

<li>DESMac</li>

<li>DESMac/CFB8</li>

<li>DESedeMac</li>

<li>DESedeMac/CFB8</li>

<li>DESedeMac64</li>

<li>SKIPJACKMac</li>

<li>SKIPJACKMac/CFB8</li>

<li>IDEAMac</li>

<li>IDEAMac/CFB8</li>

<li>RC2Mac</li>

<li>RC2Mac/CFB8</li>

<li>RC5Mac</li>

<li>RC5Mac/CFB8</li>

<li>ISO9797ALG3Mac</li>

</ul>

<h4>Signature

Algorithms</h4>

<p>Schemes:

<ul>

<li>DSTU4145</li>

<li>Ed25519</li>

<li>Ed448</li>

<li>GOST3411withGOST3410 (GOST3411withGOST3410-94)</li>

<li>GOST3411withECGOST3410 (GOST3411withGOST3410-2001)</li>

<li>MD2withRSA</li>

<li>MD5withRSA</li>

<li>SHA1withRSA</li>

<li>RIPEMD128withRSA</li>

<li>RIPEMD160withRSA</li>

<li>RIPEMD160withDSA</li>

<li>RIPEMD160withECDSA</li>

<li>RIPEMD256withRSA</li>

<li>SHA1withDSA</li>

<li>SHA224withDSA</li>

<li>SHA256withDSA</li>

<li>SHA384withDSA</li>

<li>SHA512withDSA</li>

<li>SHA3-224withDSA</li>

<li>SHA3-256withDSA</li>

<li>SHA3-384withDSA</li>

- <li>SHA3-512withDSA</li>
- <li>SHA1withDDSA</li>
- <li>SHA224withDDSA</li>
- <li>SHA256withDDSA</li>
- <li>SHA384withDDSA</li>
- <li>SHA512withDDSA</li>
- <li>SHA3-224withDDSA</li>
- <li>SHA3-256withDDSA</li>
- <li>SHA3-384withDDSA</li>
- <li>SHA3-512withDDSA</li>
- <li>NONEwithDSA</li>
- <li>SHA1withDetECDSA</li>
- <li>SHA224withECDDSA</li>
- <li>SHA256withECDDSA</li>
- <li>SHA384withECDDSA</li>
- <li>SHA512withECDDSA</li>
- <li>SHA1withECDSA</li>
- <li>NONEwithECDSA</li>
- <li>SHA224withECDSA</li>
- <li>SHA256withECDSA</li>
- <li>SHA384withECDSA</li>
- <li>SHA512withECDSA</li>
- <li>SHA3-224withECDSA</li>
- <li>SHA3-256withECDSA</li>
- <li>SHA3-384withECDSA</li>
- <li>SHA3-512withECDSA</li>
- <li>SHAKE128withECDSA</li>
- <li>SHAKE256withECDSA</li>
- <li>SHA1withPLAIN-ECDSA</li>
- <li>SHA224withPLAIN-ECDSA</li>
- <li>SHA256withPLAIN-ECDSA</li>
- <li>SHA384withPLAIN-ECDSA</li>
- <li>SHA512withPLAIN-ECDSA</li>
- <li>SHA3-224withPLAIN-ECDSA</li>
- <li>SHA3-256withPLAIN-ECDSA</li>
- <li>SHA3-384withPLAIN-ECDSA</li>
- <li>SHA3-512withPLAIN-ECDSA</li>
- <li>SHA1withECNR</li>
- <li>SHA224withECNR</li>
- <li>SHA256withECNR</li>
- <li>SHA384withECNR</li>
- <li>SHA512withECNR</li>
- <li>SHA224withRSA</li>
- <li>SHA256withRSA</li>
- <li>SHA384withRSA</li>
- <li>SHA512withRSA</li>
- <li>SHA512(224)withRSA</li>
- <li>SHA512(256)withRSA</li>

- <li>SHA3-224withRSA</li>
- <li>SHA3-256withRSA</li>
- <li>SHA3-384withRSA</li>
- <li>SHA3-512withRSA</li>
- <li>SHA1withRSAandMGF1</li>
- <li>SHA256withRSAandMGF1</li>
- <li>SHA384withRSAandMGF1</li>
- <li>SHA512withRSAandMGF1</li>
- <li>SHA512(224)withRSAandMGF1</li>
- <li>SHA512(256)withRSAandMGF1</li>
- <li>SHA1withRSA/ISO9796-2</li>
- <li>RIPEMD160withRSA/ISO9796-2</li>
- <li>SHA1withRSA/X9.31</li>
- <li>SHA224withRSA/X9.31</li>
- <li>SHA256withRSA/X9.31</li>
- <li>SHA384withRSA/X9.31</li>
- <li>SHA512withRSA/X9.31</li>
- <li>SHA512(224)withRSA/X9.31</li>
- <li>SHA512(256)withRSA/X9.31</li>
- <li>RIPEMD128withRSA/X9.31</li>
- <li>RIPEMD160withRSA/X9.31</li>
- <li>WHIRLPOOLwithRSA/X9.31</li>
- <li>SHA512withSPHINCS256  
(BCPQC)</li>
- <li>SHA3-512withSPHINCS256 (BCPQC)</li>
- <li>SHA256withSM2</li>
- <li>SM3withSM2</li>
- <li>LMS</li>
- <li>Dilithium</li>
- <li>Falcon</li>
- <li>Picnic</li>
- <li>SPHINCS+</li>
- <li>XMSS-SHA256</li>
- <li>XMSS-SHA512</li>
- <li>XMSS-SHAKE128</li>
- <li>XMSS-SHAKE256</li>
- <li>XMSSMT-SHA256</li>
- <li>XMSSMT-SHA512</li>
- <li>XMSSMT-SHAKE128</li>
- <li>XMSSMT-SHAKE256</li>
- <li>SHA256withXMSS-SHA256</li>
- <li>SHA512withXMSS-SHA512</li>
- <li>SHAKE128withXMSS-SHAKE128</li>
- <li>SHAKE256withXMSS-SHAKE256</li>
- <li>SHA256withXMSSMT-SHA256</li>
- <li>SHA512withXMSSMT-SHA512</li>
- <li>SHAKE128withXMSSMT-SHAKE128</li>
- <li>SHAKE256withXMSSMT-SHAKE256</li>

</ul>

#### <h4>Password Hashing and PBE</h4>

<p>Schemes:

<ul>

<li>BCrypt</li>

<li>OpenBSDBcrypt</li>

<li>SCrypt</li>

<li>PKCS5S1, any Digest, any symmetric Cipher, ASCII </li>

<li>PKCS5S2, any HMAC, any symmetric Cipher, ASCII, UTF8</li>

<li>PKCS12, any Digest, any symmetric Cipher, Unicode </li>

</ul>

<p>

Defined in Bouncy Castle JCE Provider

<table

cellpadding=5 cellspacing=0 border=1 width=80%>

<tr><th>Name</th><th>Key Generation Scheme</th><th>Key Length (in bits)</th><th>Char to Byte conversion</th></tr>

<tr><td>PBEWithMD2AndDES</td><td>PKCS5 Scheme 1</td><td>64</td><td>8 bit chars</td></tr>

<tr><td>PBEWithMD2AndRC2</td><td>PKCS5 Scheme 1</td><td>128</td><td>8 bit chars</td></tr>

<tr><td>PBEWithMD5AndDES</td><td>PKCS5 Scheme 1</td><td>64</td><td>8 bit chars</td></tr>

<tr><td>PBEWithMD5AndRC2</td><td>PKCS5 Scheme 1</td><td>128</td><td>8 bit chars</td></tr>

<tr><td>PBEWithSHA1AndDES</td><td>PKCS5 Scheme 1</td><td>64</td><td>8 bit chars</td></tr>

<tr><td>PBEWithSHA1AndRC2</td><td>PKCS5 Scheme 1</td><td>128</td><td>8 bit chars</td></tr>

<tr><td>PBKDF2WithHmacSHA1</td><td>PKCS5 Scheme 2</td><td>variable</td><td>UTF-8 chars</td></tr>

<tr><td>PBKDF2WithHmacSHA1AndUTF8</td><td>PKCS5 Scheme 2</td><td>variable</td><td>UTF-8 chars</td></tr>

<tr><td>PBKDF2WithHmacSHA1And8bit</td><td>PKCS5 Scheme 2</td><td>variable</td><td>8 bit chars</td></tr>

<tr><td>PBKDF2WithHmacSHA224</td><td>PKCS5 Scheme 2</td><td>variable</td><td>UTF-8 chars</td></tr>

<tr><td>PBKDF2WithHmacSHA256</td><td>PKCS5 Scheme 2</td><td>variable</td><td>UTF-8 chars</td></tr>

<tr><td>PBKDF2WithHmacSHA384</td><td>PKCS5 Scheme 2</td><td>variable</td><td>UTF-8 chars</td></tr>

<tr><td>PBKDF2WithHmacSHA512</td><td>PKCS5 Scheme 2</td><td>variable</td><td>UTF-8 chars</td></tr>

<tr><td>PBKDF2WithHmacSHA3-224</td><td>PKCS5 Scheme 2</td><td>variable</td><td>UTF-8 chars</td></tr>

<tr><td>PBKDF2WithHmacSHA3-256</td><td>PKCS5 Scheme 2</td><td>variable</td><td>UTF-8 chars</td></tr>

<tr><td>PBKDF2WithHmacSHA3-384</td><td>PKCS5 Scheme 2</td><td>variable</td><td>UTF-8 chars</td></tr>

<tr><td>PBKDF2WithHmacSHA3-512</td><td>PKCS5 Scheme 2</td><td>variable</td><td>UTF-8 chars</td></tr>

<tr><td>PBKDF2WithHmacGOST3411</td><td>PKCS5 Scheme 2</td><td>variable</td><td>UTF-8

chars				
PBKDF2WithHmacSM3	PKCS5 Scheme 2	variable	UTF-8 chars	
PBEWithSHAAnd2-KeyTripleDES-CBC	PKCS12	128	16 bit chars	
PBEWithSHAAnd3-KeyTripleDES-CBC	PKCS12	192	16 bit chars	
PBEWithSHAAnd128BitRC2-CBC	PKCS12	128	16 bit chars	
PBEWithSHAAnd40BitRC2-CBC	PKCS12	40	16 bit chars	
PBEWithSHAAnd128BitRC4	PKCS12	128	16 bit chars	
PBEWithSHAAnd40BitRC4	PKCS12	40	16 bit chars	
PBEWithSHAAndTwofish-CBC	PKCS12	256	16 bit chars	
PBEWithSHAAndIDEA-CBC	PKCS12	128	16 bit chars	

### 6.3 Certificates

The Bouncy Castle provider will read X.509 certificates (v2 or v3) as per the examples in the java.security.cert.CertificateFactory class. They can be provided either in the normal PEM encoded format, or as DER binaries.

The

CertificateFactory will also read X.509 CRLs (v2) from either PEM or DER encodings.

In addition to the classes in the org.bouncycastle.asn1.x509 package for certificate, CRLs, and OCSP, CRMF, and CMP message

generation a more JCE "friendly" class is provided in the package org.bouncycastle.cert. The JCE "friendly" classes found in the jcajce

subpackages support RSA, DSA, GOST, DTSU, and EC-DSA.

### 6.4 Keystore

The Bouncy Castle package has four implementation of a keystore.

The first "BKS" is a keystore that will work with the keytool in the same fashion as the Sun "JKS" keystore. The keystore is resistant to tampering but not inspection.

The second, **Keystore.BouncyCastle**, or **Keystore.UBER** will only work with the keytool if the password is provided on the command line, as the entire keystore is encrypted

with a PBE based on SHA1 and Twofish. **PBEWithSHAAndTwofish-CBC**.

This makes the entire keystore resistant to tampering and inspection,

and forces verification.

The Sun JDK provided keytool will attempt to load a keystore even if no password is given,

this is impossible for this version. (One might wonder about going to all this trouble and then having the password on the command line! New keytool anyone?).



<p>

In the first case, the keys are encrypted with 3-Key-TripleDES.

<p>

The third is a PKCS12 compatible keystore. PKCS12 provides a slightly different situation from the regular key store, the keystore password is currently the only password used for storing keys. Otherwise it supports all the functionality required for it to be used with the keytool. In some situations other libraries always expect to be dealing with Sun certificates, if this is the case use PKCS12-DEF, and the certificates produced by the key store will be made using the default provider. In the default case PKCS12 uses 3DES for key protection and 40 bit RC2 for protecting the certificates. It is also possible to use 3DES for both by using PKCS12-3DES-3DES or PKCS12-DEF-3DES-3DES as the KeyStore type.

<p>

There is an example program that produces PKCS12 files suitable for loading into browsers. It is in the package org.bouncycastle.jce.examples.

<p>

The fourth is the BCFKS key store which is a FIPS compliant key store which is also designed for general key storage and based on ASN.1. This key store type is encrypted and supports the use of SCRYPT and the storage of some symmetric key types.

<p>

### <h3>6.5 Additional support classes for Elliptic Curve.</h3>

<p>

There are no classes for supporting EC in the JDK prior to JDK 1.5. If you are using an earlier JDK you can find classes for using EC in the following packages:

<ul>

<li>org.bouncycastle.jce.spec</li>

<li>org.bouncycastle.jce.interfaces</li>

<li>org.bouncycastle.jce</li>

</ul>

### <h3>7.0 BouncyCastle S/MIME</h3>

To be able to fully compile and utilise the BouncyCastle S/MIME package (including the test classes) you need the jar files for the following APIs.

<ul>

<li>JUnit

- <a href="https://www.junit.org">https://www.junit.org</a></li>

<li>JavaMail - <a

href="https://java.sun.com/products/javamail/index.html">https://java.sun.com/products/javamail/index.html</a></li>

<li>The Java Activation Framework - <a

href="https://java.sun.com/products/javabeans/glasgow/jaf.html">https://java.sun.com/products/javabeans/glasgow/jaf.html</a></li>

</ul>

### 7.1 Setting up BouncyCastle S/MIME in JavaMail

The BouncyCastle S/MIME handlers may be set in JavaMail two ways.

<ul>

<li> STATICALLY<br>

Add the following entries to the mailcap file:

<pre>

```
application/pkcs7-signature;; x-java-content-handler=org.bouncycastle.mail.smime.handlers.pkcs7_signature
application/pkcs7-mime;; x-java-content-handler=org.bouncycastle.mail.smime.handlers.pkcs7_mime
application/x-pkcs7-signature;; x-java-content-handler=org.bouncycastle.mail.smime.handlers.x_pkcs7_signature
application/x-pkcs7-mime;; x-java-content-handler=org.bouncycastle.mail.smime.handlers.x_pkcs7_mime
multipart/signed;; x-java-content-handler=org.bouncycastle.mail.smime.handlers.multipart_signed
```

</pre>

</li>

<li> DYNAMICALLY<br>

The following code will add the BouncyCastle S/MIME handlers dynamically:

<pre>

```
import javax.activation.MailcapCommandMap;
import javax.activation.CommandMap;
```

```
public static void setDefaultMailcap()
```

```
{
```

```
 MailcapCommandMap _mailcap =
 (MailcapCommandMap)CommandMap.getDefaultCommandMap();
```

```
 _mailcap.addMailcap("application/pkcs7-signature;; x-java-content-
handler=org.bouncycastle.mail.smime.handlers.pkcs7_signature");
```

```
 _mailcap.addMailcap("application/pkcs7-mime;; x-java-content-
handler=org.bouncycastle.mail.smime.handlers.pkcs7_mime");
```

```
 _mailcap.addMailcap("application/x-pkcs7-signature;; x-java-content-
handler=org.bouncycastle.mail.smime.handlers.x_pkcs7_signature");
```

```
 _mailcap.addMailcap("application/x-pkcs7-mime;; x-java-content-
handler=org.bouncycastle.mail.smime.handlers.x_pkcs7_mime");
```

```
 _mailcap.addMailcap("multipart/signed;; x-java-content-
handler=org.bouncycastle.mail.smime.handlers.multipart_signed");
```

```
 CommandMap.setDefaultCommandMap(_mailcap);
```

```
}
```

</pre>

</li>

</ul>

</body>

</html>

Found in path(s):

\* /opt/cola/permits/1888827881\_1711357236.7377977/0/bcpkix-jdk18on-177-tar-gz/bcpkix-jdk18on-177/docs/specifications.html

No license file was found, but licenses were detected in source scan.

/\*\*

\* Base constructor.

\* <p>

\* The authorizer attempts to perform matching (including the use of the wildcard) in accordance with RFC 6125.

\* </p>

\* <p>

\* Known suffixes is a list of public domain suffixes that can't be used as wild cards for

\* example \*.com, or c\*c.com, as a dns wildcard could match every/most .com domains if a registrar were issue it.

\* If \*.com is in the known suffixes list will not be allowed to match.

\* </p>

\*

\* @param knownSuffixes a set of suffixes that cannot be wild-carded, e.g. { ".com", ".net", ".org" }

\*/

Found in path(s):

\* /opt/cola/permits/1888827881\_1711357236.7377977/0/bcpkix-jdk18on-177-tar-gz/bcpkix-jdk18on-177/src-  
zip/org/bouncycastle/est/jcajce/JsseDefaultHostnameAuthorizer.java

No license file was found, but licenses were detected in source scan.

<html>

<head>

<title>The Bouncy Castle Crypto Package</title>

</head>

<body bgcolor="#ffffff" text="#000000#">

<center>

<h1>The Bouncy Castle Crypto Package</h1>

<font size=1>

<pre>

</pre>

</font>

</center>

The Bouncy Castle Crypto package is a Java implementation of cryptographic algorithms, it was developed by the Legion of the Bouncy Castle, a registered Australian Charity, with a little help! The Legion, and the latest goings on with this package, can be found at

<a href=https://www.bouncycastle.org>https://www.bouncycastle.org</a>.

<p>

The Legion also gratefully acknowledges the contributions made to this package by others (see <a href=CONTRIBUTORS.html>here</a>

for the current list). If you would like to contribute to our efforts please feel free to get in touch with us or visit our

<a href="https://www.bouncycastle.org/donate">donations page</a>, sponsor some specific work, or purchase a

support contract through

[Crypto Workshop](https://www.cryptoworkshop.com).

The package is organised so that it

contains a light-weight API suitable for use in any environment

(including the newly released J2ME) with the additional infrastructure

to conform the algorithms to the JCE framework.

Except where otherwise stated, this software is distributed under a license based on the MIT X Consortium license.

To view the license, [see here](/LICENSE.html). The OpenPGP library also includes a modified

BZIP2 library which is licensed under the [Apache Software License](https://www.apache.org/licenses/),

Version 2.0.

The current release notes for this package are

[here](docs/releasenotes.html).

The current specifications for this package are

[here](docs/specifications.html).

The current JavaDoc for the Bouncy Castle APIs can be found

[here](javadoc/index.html).

Additional documentation on

use of the classes can also be found in the [docs](docs/index.html) directory.

## Examples and Tests

To view some examples, look at the test programs in the packages:

- 

- org.bouncycastle.crypto.test**

- org.bouncycastle.jce.provider.test**

- org.bouncycastle.cms.test**

- org.bouncycastle.mail.smime.test**

- org.bouncycastle.openpgp.test**

- org.bouncycastle.tsp.test**

- 

There are also some specific example programs for dealing with Attribute Certificates, PKCS12, SMIME and OpenPGP. They can be found in:

- 

- org.bouncycastle.jce.examples**

<li><p><b>org.bouncycastle.mail.smime.examples</b>

<li><p><b>org.bouncycastle.openpgp.examples</b>

<li><p><b>org.bouncycastle.x509.examples</b>

</ul>

<p>Finally there are also code <a href="https://www.wiley.com/WileyCDA/WileyAncillary/productCd-0764596330.html">examples</a>

from <a

href="https://www.amazon.com/exec/obidos/redirect?path=ASIN/0764596330&amp;link\_code=as2&amp;camp=1789&amp;tag=bouncycastle-20&amp;creative=9325">Beginning Cryptography with Java</a> which demonstrate both the use of the JCE/JCA and also some of the Bouncy Castle APIs.</p>

<p>

<b>Note 1:</b>The JCE classes are only distributed with the JDK 1.1, JDK 1.2, and JDK 1.3 JCE releases. The JDK 1.0, J2ME, and the JDK 1.1, JDK 1.2, JDK 1.3, JDK 1.4, and JDK 1.5 lightweight releases only include the Bouncy Castle lightweight cryptography API.<br>

<b>Note 2:</b>The regression test for Diffie-Hellman is quite slow.

<p>

The clean room JCE, which will compile with everything from JDK 1.1 and up is in the jce/src/main/java directory.

</p>

<p>

The build scripts that come with the full distribution allow creation of the different releases by using the tree under src and test/src, excluding classes that are not appropriate and copying in the required compatibility classes from the directories containing

compatibility classes appropriate for the distribution.

</p>

<p>

If you want to try create a build for yourself, using your own environment, the best way to do it is to start with the build for the distribution you are interested in, make sure that builds, and then modify your build scripts to do the required exclusions and file copies for your setup, otherwise you are likely to get class not found exceptions. The final caveat to this is that as the j2me distribution includes some compatibility classes starting in the java package, you need to use an obfuscator to change the package names before attempting to import a midlet using the BC API.

</p>

## <h2>Mailing Lists</h2>

<p>

For those who are interested, there are 2 mailing lists

for participation in this project. To subscribe use the

links below and include the word subscribe in the message body. (To unsubscribe, replace <b>subscribe</b> with

<b>unsubscribe</b> in the message body)

<ul>

<li><a href="mailto:announce-crypto-request@bouncycastle.org">announce-crypto-request@bouncycastle.org</a>

<br>

This

mailing list is for new release announcements only, general subscribers cannot post to it.

<p>

<li><a href="mailto:dev-crypto-request@bouncycastle.org">dev-crypto-request@bouncycastle.org</a>

<br>

This mailing list is for discussion of development of the package. This

includes bugs, comments, requests for enhancements, questions about use or operation.

</ul>

<b>NOTE:</b>You need to be subscribed to send mail to the above mailing list.

<p>

If you want to provide feedback, directly to the members of <b>The Legion</b> then please use <a href="mailto:feedback-crypto@bouncycastle.org">feedback-crypto@bouncycastle.org</a>, if you want to help this project survive please consider <a href="https://www.bouncycastle.org/donate">donating</a> or getting a <a href="https://www.cryptoworkshop.com">support contract</a>.

<p>

Enjoy!

</body>

</html>

Found in path(s):

\* /opt/cola/permits/1888827881\_1711357236.7377977/0/bcpkix-jdk18on-177-tar-gz/bcpkix-jdk18on-177/index.html

No license file was found, but licenses were detected in source scan.

Known suffixes is a list of public domain suffixes that can't be used as wild cards for

Found in path(s):

\* /opt/cola/permits/1888827881\_1711357236.7377977/0/bcpkix-jdk18on-177-tar-gz/bcpkix-jdk18on-177/javadoc/org/bouncycastle/est/jcajce/JsseDefaultHostnameAuthorizer.html

## 1.38 libxml2 2.12.5

### 1.38.1 Available under license :

Except where otherwise noted in the source code (e.g. the files dict.c, list.c and the trio files, which are covered by a similar licence but with different Copyright notices) all the files are:

Copyright (C) 1998-2012 Daniel Veillard. All Rights Reserved.

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FIT-

NESS FOR A PARTICULAR PURPOSE  
AND NONINFRINGEMENT. IN NO EVENT SHALL THE  
AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER  
LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM,  
OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN  
THE SOFTWARE.

## 1.39 fmt 10.1.1

### 1.39.1 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
3.1.2	3.1.1	2010	PSF	yes
3.1.3	3.1.2	2010	PSF	yes
3.1.4	3.1.3	2011	PSF	yes
3.2	3.1	2011	PSF	yes
3.2.1	3.2	2011		
	PSF	yes		
3.2.2	3.2.1	2011	PSF	yes
3.2.3	3.2.2	2012	PSF	yes
3.3.0	3.2	2012	PSF	yes

Footnotes:

(1) GPL-compatible doesn't mean that we're distributing Python under the GPL. All Python licenses, unlike the GPL, let you distribute



a modified version without making your changes open source. The GPL-compatible licenses make it possible to combine Python with other software that is released under the GPL; the others don't.

- (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.

## B. TERMS AND CONDITIONS FOR ACCESSING OR OTHERWISE USING PYTHON

=====

### PYTHON SOFTWARE FOUNDATION LICENSE VERSION 2

-----

1. This LICENSE AGREEMENT is between the Python Software Foundation ("PSF"), and the Individual or Organization ("Licensee") accessing and otherwise using this software ("Python") in source or binary form and its associated documentation.
2. Subject to the terms and conditions of this License Agreement, PSF hereby grants Licensee a nonexclusive, royalty-free, world-wide license to reproduce, analyze, test, perform and/or display publicly, prepare derivative works, distribute, and otherwise use Python alone or in any derivative version, provided, however, that PSF's License Agreement and PSF's notice of copyright, i.e., "Copyright (c) 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012 Python Software Foundation; All Rights Reserved" are retained in Python alone or in any derivative version prepared by Licensee.
3. In the event Licensee prepares a derivative work that is based on or incorporates Python or any part thereof, and wants to make the derivative work available to others as provided herein, then Licensee hereby agrees to include in any such work a brief summary of the changes made to Python.
4. PSF is making Python available to Licensee on an "AS IS" basis. PSF MAKES NO REPRESENTATIONS OR WARRANTIES, EXPRESS OR IMPLIED. BY WAY OF EXAMPLE, BUT NOT LIMITATION, PSF MAKES NO AND DISCLAIMS ANY REPRESENTATION OR WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OR THAT THE USE OF PYTHON WILL NOT INFRINGE ANY THIRD PARTY RIGHTS.

5. PSF SHALL NOT BE LIABLE TO LICENSEE OR ANY OTHER USERS OF PYTHON FOR ANY INCIDENTAL, SPECIAL, OR CONSEQUENTIAL DAMAGES OR LOSS AS A RESULT OF MODIFYING, DISTRIBUTING, OR OTHERWISE USING PYTHON, OR ANY DERIVATIVE THEREOF, EVEN IF ADVISED OF THE POSSIBILITY THEREOF.

6. This License Agreement will automatically terminate upon a material breach of its terms and conditions.

7.

Nothing in this License Agreement shall be deemed to create any relationship of agency, partnership, or joint venture between PSF and Licensee. This License Agreement does not grant permission to use PSF trademarks or trade name in a trademark sense to endorse or promote products or services of Licensee, or any third party.

8. By copying, installing or otherwise using Python, Licensee agrees to be bound by the terms and conditions of this License Agreement.

BEOPEN.COM LICENSE AGREEMENT FOR PYTHON 2.0

-----

BEOPEN PYTHON OPEN SOURCE LICENSE AGREEMENT VERSION 1

1. This LICENSE AGREEMENT is between BeOpen.com ("BeOpen"), having an office at 160 Saratoga Avenue, Santa Clara, CA 95051, and the Individual or Organization ("Licensee") accessing and otherwise using this software in source or binary form and its associated documentation ("the Software").

2. Subject to the terms and conditions of this BeOpen Python License Agreement, BeOpen hereby grants Licensee a non-exclusive, royalty-free, world-wide license to reproduce, analyze, test, perform and/or display publicly, prepare derivative works, distribute, and otherwise use the Software alone or in any derivative version, provided, however, that the BeOpen Python License is retained in the Software, alone or in any derivative version prepared by Licensee.

3. BeOpen is making the Software available to Licensee on an "AS IS" basis. BEOPEN MAKES NO REPRESENTATIONS OR WARRANTIES, EXPRESS OR IMPLIED. BY WAY OF EXAMPLE, BUT NOT LIMITATION, BEOPEN MAKES NO AND DISCLAIMS ANY REPRESENTATION OR WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OR THAT THE USE OF THE SOFTWARE WILL NOT INFRINGE ANY THIRD PARTY RIGHTS.

4. BEOPEN SHALL NOT BE LIABLE TO LICENSEE OR ANY OTHER USERS OF THE

SOFTWARE FOR ANY INCIDENTAL, SPECIAL, OR CONSEQUENTIAL DAMAGES OR LOSS AS A RESULT OF USING, MODIFYING OR DISTRIBUTING THE SOFTWARE, OR ANY DERIVATIVE THEREOF, EVEN IF ADVISED OF THE POSSIBILITY THEREOF.

5. This License Agreement will automatically terminate upon a material breach of its terms and conditions.

6. This License Agreement shall be governed by and interpreted in all respects by the law of the State of California, excluding conflict of law provisions. Nothing in this License Agreement shall be deemed to create any relationship of agency, partnership, or joint venture between BeOpen and Licensee. This License Agreement does not grant permission to use BeOpen trademarks or trade names in a trademark sense to endorse or promote products or services of Licensee, or any third party. As an exception, the "BeOpen Python" logos available at <http://www.pythonlabs.com/logos.html> may be used according to the permissions granted on that web page.

7. By copying, installing or otherwise using the software, Licensee agrees to be bound by the terms and conditions of this License Agreement.

#### CNRI LICENSE AGREEMENT FOR PYTHON 1.6.1

-----

1.

This LICENSE AGREEMENT is between the Corporation for National Research Initiatives, having an office at 1895 Preston White Drive, Reston, VA 20191 ("CNRI"), and the Individual or Organization ("Licensee") accessing and otherwise using Python 1.6.1 software in source or binary form and its associated documentation.

2. Subject to the terms and conditions of this License Agreement, CNRI hereby grants Licensee a nonexclusive, royalty-free, world-wide license to reproduce, analyze, test, perform and/or display publicly, prepare derivative works, distribute, and otherwise use Python 1.6.1 alone or in any derivative version, provided, however, that CNRI's License Agreement and CNRI's notice of copyright, i.e., "Copyright (c) 1995-2001 Corporation for National Research Initiatives; All Rights Reserved" are retained in Python 1.6.1 alone or in any derivative version prepared by Licensee. Alternately, in lieu of CNRI's License Agreement, Licensee may substitute the following text (omitting the quotes): "Python 1.6.1 is made available subject to the terms and conditions in CNRI's License Agreement. This Agreement together with Python 1.6.1 may be located on the Internet using the following

unique, persistent identifier (known as a handle): 1895.22/1013. This Agreement may also be obtained from a proxy server on the Internet using the following URL: <http://hdl.handle.net/1895.22/1013>".

3. In the event Licensee prepares a derivative work that is based on or incorporates Python 1.6.1 or any part thereof, and wants to make the derivative work available to others as provided herein, then Licensee hereby agrees to include in any such work a brief summary of the changes made to Python 1.6.1.

4. CNRI is making Python 1.6.1 available to Licensee on an "AS IS" basis. CNRI MAKES NO REPRESENTATIONS OR WARRANTIES, EXPRESS OR IMPLIED. BY WAY OF EXAMPLE, BUT NOT LIMITATION, CNRI MAKES NO AND DISCLAIMS ANY REPRESENTATION OR WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OR THAT THE USE OF PYTHON 1.6.1 WILL NOT INFRINGE ANY THIRD PARTY RIGHTS.

5. CNRI SHALL NOT BE LIABLE TO LICENSEE OR ANY OTHER USERS OF PYTHON 1.6.1 FOR ANY INCIDENTAL, SPECIAL, OR CONSEQUENTIAL DAMAGES OR LOSS AS A RESULT OF MODIFYING, DISTRIBUTING, OR OTHERWISE USING PYTHON 1.6.1, OR ANY DERIVATIVE THEREOF, EVEN IF ADVISED OF THE POSSIBILITY THEREOF.

6. This License Agreement will automatically terminate upon a material breach of its terms and conditions.

7. This License Agreement shall be governed by the federal intellectual property law of the United States, including without limitation the federal copyright law, and, to the extent such U.S. federal law does not apply, by the law of the Commonwealth of Virginia, excluding Virginia's conflict of law provisions. Notwithstanding the foregoing, with regard to derivative works based on Python 1.6.1 that incorporate non-separable material that was previously distributed under the GNU General Public License (GPL), the law of the Commonwealth of Virginia shall govern this License Agreement only as to issues arising under or with respect to Paragraphs 4, 5, and 7 of this License Agreement. Nothing in this License Agreement shall be deemed to create any relationship of agency, partnership, or joint venture between CNRI and Licensee. This License Agreement does not grant permission to use CNRI trademarks or trade name in a trademark sense to endorse or promote products or services of Licensee, or any third party.

8. By clicking on the "ACCEPT" button where indicated, or by copying, installing or otherwise using Python 1.6.1, Licensee agrees to be bound by the terms and conditions of this License Agreement.

ACCEPT

CWI LICENSE AGREEMENT FOR PYTHON 0.9.0 THROUGH 1.2  
-----

Copyright (c) 1991 - 1995, Stichting Mathematisch Centrum Amsterdam,  
The Netherlands. All rights reserved.

Permission to use, copy, modify, and distribute this software  
and its  
documentation for any purpose and without fee is hereby granted,  
provided that the above copyright notice appear in all copies and that  
both that copyright notice and this permission notice appear in  
supporting documentation, and that the name of Stichting Mathematisch  
Centrum or CWI not be used in advertising or publicity pertaining to  
distribution of the software without specific, written prior  
permission.

STICHTING MATHEMATISCH CENTRUM DISCLAIMS ALL WARRANTIES WITH REGARD TO  
THIS SOFTWARE, INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND  
FITNESS, IN NO EVENT SHALL STICHTING MATHEMATISCH CENTRUM BE LIABLE  
FOR ANY SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES OR ANY DAMAGES  
WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN  
ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT  
OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE.

## 1.40 nimbus-jose-jwt 9.0

### 1.40.1 Available under license :

Nimbus JOSE + JWT

Copyright 2012 - 2020, Connect2id Ltd.

Licensed under the Apache License, Version 2.0 (the "License"); you may not use  
this file except in compliance with the License. You may obtain a copy of the  
License at

<http://www.apache.org/licenses/LICENSE-2.0>

Unless required by applicable law or agreed to in writing, software distributed  
under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR  
CONDITIONS OF ANY KIND, either express or implied. See the License for the  
specific language governing permissions and limitations under the License.

Apache License  
Version 2.0, January 2004

## TERMS AND CONDITIONS FOR USE, REPRODUCTION, AND DISTRIBUTION

### 1. Definitions.

"License" shall mean the terms and conditions for use, reproduction, and distribution as defined by Sections 1 through 9 of this document.

"Licensor" shall mean the copyright owner or entity authorized by the copyright owner that is granting the License.

"Legal Entity" shall mean the union of the acting entity and all other entities that control, are controlled by, or are under common control with that entity. For the purposes of this definition, "control" means (i) the power, direct or indirect, to cause the direction or management of such entity, whether by contract or otherwise, or (ii) ownership of fifty percent (50%) or more of the outstanding shares, or (iii) beneficial ownership of such entity.

"You" (or "Your") shall mean an individual or Legal Entity exercising permissions granted by this License.

"Source" form shall mean the preferred form for making modifications, including but not limited to software source code, documentation source, and configuration files.

"Object" form shall mean any form resulting from mechanical transformation or translation of a Source form, including but not limited to compiled object code, generated documentation, and conversions to other media types.

"Work" shall mean the work of authorship, whether in Source or Object form, made available under the License, as indicated by a copyright notice that is included in or attached to the work (an example is provided in the Appendix below).

"Derivative Works" shall mean any work, whether in Source or Object form, that is based on (or derived from) the Work and for which the editorial revisions, annotations, elaborations, or other modifications represent, as a whole, an original work of authorship. For the purposes of this License, Derivative Works shall not include works that remain separable from, or merely link (or bind by name) to the interfaces of, the Work and Derivative Works thereof.

"Contribution" shall mean any work of authorship, including

the original version of the Work and any modifications or additions to that Work or Derivative Works thereof, that is intentionally submitted to Licensor for inclusion in the Work by the copyright owner or by an individual or Legal Entity authorized to submit on behalf of the copyright owner. For the purposes of this definition, "submitted" means any form of electronic, verbal, or written communication sent to the Licensor or its representatives, including but not limited to communication on electronic mailing lists, source code control systems, and issue tracking systems that are managed by, or on behalf of, the Licensor for the purpose of discussing and improving the Work, but excluding communication that is conspicuously marked or otherwise designated in writing by the copyright owner as "Not a Contribution."

"Contributor" shall mean Licensor and any individual or Legal Entity on behalf of whom a Contribution has been received by Licensor and subsequently incorporated within the Work.

2. Grant of Copyright License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable copyright license to reproduce, prepare Derivative Works of, publicly display, publicly perform, sublicense, and distribute the Work and such Derivative Works in Source or Object form.

3. Grant of Patent License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable (except as stated in this section) patent license to make, have made, use, offer to sell, sell, import, and otherwise transfer the Work, where such license applies only to those patent claims licensable by such Contributor that are necessarily infringed by their Contribution(s) alone or by combination of their Contribution(s) with the Work to which such Contribution(s) was submitted. If You institute patent litigation against any entity (including a cross-claim or counterclaim in a lawsuit) alleging that the Work or a Contribution incorporated within the Work constitutes direct or contributory patent infringement, then any patent licenses granted to You under this License for that Work shall terminate as of the date such litigation is filed.

4. Redistribution. You may reproduce and distribute copies of the Work or Derivative Works thereof in any medium, with or without modifications, and in Source or Object form, provided that You meet the following conditions:

(a) You must give any other recipients of the Work or

Derivative Works a copy of this License; and

- (b) You must cause any modified files to carry prominent notices stating that You changed the files; and
- (c) You must retain, in the Source form of any Derivative Works that You distribute, all copyright, patent, trademark, and attribution notices from the Source form of the Work, excluding those notices that do not pertain to any part of the Derivative Works; and
- (d) If the Work includes a "NOTICE" text file as part of its distribution, then any Derivative Works that You distribute must include a readable copy of the attribution notices contained within such NOTICE file, excluding those notices that do not pertain to any part of the Derivative Works, in at least one of the following places: within a NOTICE text file distributed as part of the Derivative Works; within the Source form or documentation, if provided along with the Derivative Works; or, within a display generated by the Derivative Works, if and wherever such third-party notices normally appear. The contents of the NOTICE file are for informational purposes only and do not modify the License. You may add Your own attribution notices within Derivative Works that You distribute, alongside or as an addendum to the NOTICE text from the Work, provided that such additional attribution notices cannot be construed as modifying the License.

You may add Your own copyright statement to Your modifications and may provide additional or different license terms and conditions

for use, reproduction, or distribution of Your modifications, or for any such Derivative Works as a whole, provided Your use, reproduction, and distribution of the Work otherwise complies with the conditions stated in this License.

5. Submission of Contributions. Unless You explicitly state otherwise, any Contribution intentionally submitted for inclusion in the Work by You to the Licensor shall be under the terms and conditions of this License, without any additional terms or conditions.

Notwithstanding the above, nothing herein shall supersede or modify the terms of any separate license agreement you may have executed with Licensor regarding such Contributions.

6. Trademarks. This License does not grant permission to use the trade names, trademarks, service marks, or product names of the Licensor, except as required for reasonable and customary use in describing the



origin of the Work and reproducing the content of the NOTICE file.

7. Disclaimer of Warranty. Unless required by applicable law or agreed to in writing, Licensor provides the Work (and each Contributor provides its Contributions) on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied, including, without limitation, any warranties or conditions of TITLE, NON-INFRINGEMENT, MERCHANTABILITY, or FITNESS FOR A PARTICULAR PURPOSE. You are solely responsible for determining the appropriateness of using or redistributing the Work and assume any risks associated with Your exercise of permissions under this License.
  
8. Limitation of Liability. In no event and under no legal theory, whether in tort (including negligence), contract, or otherwise, unless required by applicable law (such as deliberate and grossly negligent acts) or agreed to in writing, shall any Contributor be liable to You for damages, including any direct, indirect, special, incidental, or consequential damages of any character arising as a result of this License or out of the use or inability to use the Work (including but not limited to damages for loss of goodwill, work stoppage, computer failure or malfunction, or any and all other commercial damages or losses), even if such Contributor has been advised of the possibility of such damages.
  
9. Accepting Warranty or Additional Liability. While redistributing the Work or Derivative Works thereof, You may choose to offer, and charge a fee for, acceptance of support, warranty, indemnity, or other liability obligations and/or rights consistent with this License. However, in accepting such obligations, You may act only on Your own behalf and on Your sole responsibility, not on behalf of any other Contributor, and only if You agree to indemnify, defend, and hold each Contributor harmless for any liability incurred by, or claims asserted against, such Contributor by reason of your accepting any such warranty or additional liability.

END OF TERMS AND CONDITIONS

APPENDIX: How to apply the Apache License to your work.

To apply the Apache License to your work, attach the following boilerplate notice, with the fields enclosed by brackets "[ ]" replaced with your own identifying information. (Don't include the brackets!) The text should be enclosed in the appropriate comment syntax for the file format. We also recommend that a file or class name and description of purpose be included on the same "printed page" as the copyright notice for easier

identification within third-party archives.

Copyright [yyyy] [name of copyright owner]

Licensed under the Apache License, Version 2.0 (the "License");

you may not use this file except in compliance with the License.

You may obtain a copy of the License at

<http://www.apache.org/licenses/LICENSE-2.0>

Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License.

## 1.41 zxing 4.3.0

### 1.41.1 Available under license :

Apache License

Version 2.0, January 2004

<http://www.apache.org/licenses/>

#### TERMS AND CONDITIONS FOR USE, REPRODUCTION, AND DISTRIBUTION

##### 1. Definitions.

"License" shall mean the terms and conditions for use, reproduction, and distribution as defined by Sections 1 through 9 of this document.

"Licensor" shall mean the copyright owner or entity authorized by the copyright owner that is granting the License.

"Legal Entity" shall mean the union of the acting entity and all other entities that control, are controlled by, or are under common control with that entity. For the purposes of this definition, "control" means (i) the power, direct or indirect, to cause the direction or management of such entity, whether by contract or otherwise, or (ii) ownership of fifty percent (50%) or more of the outstanding shares, or (iii) beneficial ownership of such entity.

"You" (or "Your") shall mean an individual or Legal Entity exercising permissions granted by this License.

"Source" form shall mean the preferred form for making modifications, including but not limited to software source code, documentation

source, and configuration files.

"Object" form shall mean any form resulting from mechanical transformation or translation of a Source form, including but not limited to compiled object code, generated documentation, and conversions to other media types.

"Work" shall mean the work of authorship, whether in Source or Object form, made available under the License, as indicated by a copyright notice that is included in or attached to the work (an example is provided in the Appendix below).

"Derivative Works" shall mean any work, whether in Source or Object form, that is based on (or derived from) the Work and for which the editorial revisions, annotations, elaborations, or other modifications represent, as a whole, an original work of authorship. For the purposes of this License, Derivative Works shall not include works that remain separable from, or merely link (or bind by name) to the interfaces of, the Work and Derivative Works thereof.

"Contribution" shall mean any work of authorship, including the original version of the Work and any modifications or additions to that Work or Derivative Works thereof, that is intentionally submitted to Licensor for inclusion in the Work by the copyright owner or by an individual or Legal Entity authorized to submit on behalf of the copyright owner. For the purposes of this definition, "submitted" means any form of electronic, verbal, or written communication sent to the Licensor or its representatives, including but not limited to communication on electronic mailing lists, source code control systems, and issue tracking systems that are managed by, or on behalf of, the Licensor for the purpose of discussing and improving the Work, but excluding communication that is conspicuously marked or otherwise designated in writing by the copyright owner as "Not a Contribution."

"Contributor" shall mean Licensor and any individual or Legal Entity on behalf of whom a Contribution has been received by Licensor and subsequently incorporated within the Work.

2. Grant of Copyright License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable copyright license to reproduce, prepare Derivative Works of, publicly display, publicly perform, sublicense, and distribute the Work and such Derivative Works in Source or Object form.

3. Grant of Patent License. Subject to the terms and conditions of this License,

each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable (except as stated in this section) patent license to make, have made, use, offer to sell, sell, import, and otherwise transfer the Work, where such license applies only to those patent claims licensable by such Contributor that are necessarily infringed by their Contribution(s) alone or by combination of their Contribution(s) with the Work to which such Contribution(s) was submitted. If You institute patent litigation against any entity (including a cross-claim or counterclaim in a lawsuit) alleging that the Work or a Contribution incorporated within the Work constitutes direct or contributory patent infringement, then any patent licenses granted to You under this License for that Work shall terminate as of the date such litigation is filed.

4. Redistribution. You may reproduce and distribute copies of the Work or Derivative Works thereof in any medium, with or without modifications, and in Source or Object form, provided that You meet the following conditions:

- (a) You must give any other recipients of the Work or Derivative Works a copy of this License; and
- (b) You must cause any modified files to carry prominent notices stating that You changed the files; and
- (c) You must retain, in the Source form of any Derivative Works that You distribute, all copyright, patent, trademark, and attribution notices from the Source form of the Work, excluding those notices that do not pertain to any part of the Derivative Works; and
- (d) If the Work includes a "NOTICE" text file as part of its distribution, then any Derivative Works that You distribute must include a readable copy of the attribution notices contained within such NOTICE file, excluding those notices that do not pertain to any part of the Derivative Works, in at least one of the following places: within a NOTICE text file distributed as part of the Derivative Works; within the Source form or documentation, if provided along with the Derivative Works; or, within a display generated by the Derivative Works, if and wherever such third-party notices normally appear. The contents of the NOTICE file are for informational purposes only and do not modify the License. You may add Your own attribution notices within Derivative Works that You distribute, alongside or as an addendum to the NOTICE text from the Work, provided

that such additional attribution notices cannot be construed as modifying the License.

You may add Your own copyright statement to Your modifications and may provide additional or different license terms and conditions

for use, reproduction, or distribution of Your modifications, or for any such Derivative Works as a whole, provided Your use, reproduction, and distribution of the Work otherwise complies with the conditions stated in this License.

5. Submission of Contributions. Unless You explicitly state otherwise, any Contribution intentionally submitted for inclusion in the Work by You to the Licensor shall be under the terms and conditions of this License, without any additional terms or conditions.

Notwithstanding the above, nothing herein shall supersede or modify the terms of any separate license agreement you may have executed with Licensor regarding such Contributions.

6. Trademarks. This License does not grant permission to use the trade names, trademarks, service marks, or product names of the Licensor, except as required for reasonable and customary use in describing the origin of the Work and reproducing the content of the NOTICE file.

7. Disclaimer of Warranty. Unless required by applicable law or agreed to in writing, Licensor provides the Work (and each Contributor provides its Contributions) on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied, including, without limitation, any warranties or conditions of TITLE, NON-INFRINGEMENT, MERCHANTABILITY, or FITNESS FOR A PARTICULAR PURPOSE. You are solely responsible for determining the appropriateness of using or redistributing the Work and assume any risks associated with Your exercise of permissions under this License.

8. Limitation of Liability. In no event and under no legal theory, whether in tort (including negligence), contract, or otherwise, unless required by applicable law (such as deliberate and grossly negligent acts) or agreed to in writing, shall any Contributor be liable to You for damages, including any direct, indirect, special, incidental, or consequential damages of any character arising as a result of this License or out of the use or inability to use the Work (including but not limited to damages for loss of goodwill, work stoppage, computer failure or malfunction, or any and all other commercial damages or losses), even if such Contributor has been advised of the possibility of such damages.

9. Accepting Warranty or Additional Liability. While redistributing the Work or Derivative Works thereof, You may choose to offer, and charge a fee for, acceptance of support, warranty, indemnity, or other liability obligations and/or rights consistent with this License. However, in accepting such obligations, You may act only on Your own behalf and on Your sole responsibility, not on behalf of any other Contributor, and only if You agree to indemnify, defend, and hold each Contributor harmless for any liability incurred by, or claims asserted against, such Contributor by reason of your accepting any such warranty or additional liability.

## END OF TERMS AND CONDITIONS

APPENDIX: How to apply the Apache License to your work.

To apply the Apache License to your work, attach the following boilerplate notice, with the fields enclosed by brackets "[]" replaced with your own identifying information. (Don't include the brackets!) The text should be enclosed in the appropriate comment syntax for the file format. We also recommend that a file or class name and description of purpose be included on the same "printed page" as the copyright notice for easier identification within third-party archives.

Copyright [yyyy] [name of copyright owner]

Licensed under the Apache License, Version 2.0 (the "License");  
you may not use this file except in compliance with the License.  
You may obtain a copy of the License at

<http://www.apache.org/licenses/LICENSE-2.0>

Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License.

## 1.42 unbound 1.19.3

### 1.42.1 Available under license :

Copyright (c) 2009, Zdenek Vasicek (vasicek AT fit.vutbr.cz)  
Marek Vavrusa (xvavru00 AT stud.fit.vutbr.cz)

All rights reserved.

Redistribution and use in source and binary forms, with or without

modification, are permitted provided that the following conditions are met:

- \* Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
- \* Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
- \* Neither the name of the organization nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

Copyright (c) 2007, NLnet Labs. All rights reserved.

This software is open source.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.

Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

Neither the name of the NLNET LABS nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT HOLDER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL,

SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

Copyright (c) 2009, Dmitriy Demidov aka terminus. All rights reserved.

This software is open source.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.

Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

Neither the name of the Dmitriy Demidov nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED.

IN NO EVENT SHALL THE REGENTS OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

Cisco and the Cisco logo are trademarks or registered trademarks of Cisco and/or its affiliates in the U.S. and other countries. To view a list of Cisco trademarks, go to this URL: [www.cisco.com/go/trademarks](http://www.cisco.com/go/trademarks). Third-party trademarks mentioned are the property of their respective owners. The use of the word partner does not imply a partnership relationship between Cisco and any other company. (1110R)

©2024 Cisco Systems, Inc. All rights reserved.