Introduction to Open Source Attribution and Table Explanation

This document consists of three parts: (i) an introductory text, (ii) a table listing the open source components used, together with their respective licenses and copyright notices, and (iii) the full license texts. The following introduction is intended to explain the purpose of this document and to provide guidance on how to read and understand the table.

Understanding the Attribution Table Structure

Our attribution table is designed to provide complete transparency regarding all open source components integrated into our vehicles. The table follows a systematic structure to ensure clarity and compliance:

The first column identifies each open source component along with its specific version number. Version tracking is critical, as different versions of the same component may be subject to different licensing terms or contain varying functionality.

The second column displays the applicable license(s) using SPDX identifiers—standardized shorthand codes maintained by the Linux Foundation that uniquely identify open source licenses. This standardization ensures consistency and eliminates ambiguity across the global software development community. In cases where a component is dual-licensed or multi-licensed (meaning it can be used under different licensing options), we list all available SPDX identifiers and explicitly indicate our selected license under the "Selected" designation. This transparency allows you to understand both the available options and our licensing decisions.

Additionally, we provide a dedicated column for copyright notices, preserving the attribution to original authors and contributors as required by most open source licenses.

License Reference Section

At the conclusion of the attribution table, you will find a comprehensive license appendix containing the full text of every license referenced in the table. Each SPDX identifier is accompanied by the complete formal name of the

corresponding license, facilitating quick reference and ensuring that all stakeholders can review the exact terms and conditions governing each component's use.

Scope of This Document

This open source attribution statement and the accompanying component table are specific to the MG4 vehicle model. All listed software components, version numbers, licenses, and copyright information pertain exclusively to the open source software deployed in the MG4.

Contact and Support

For any questions, concerns, or requests related to the open source software components used in the MG4, MG serves as your primary point of contact. Please direct all open source-related questions and requests to MG through the official contact channels outlined on our MG Open Source webpage.

License Version Table

Component, Version	License(s)	Copyright
openssl Version: V1.1.1c	OpenSSL	Copyright (c) 1998-2025 The OpenSSL Project Authors Copyright (c) 1995-1998 Eric A. Young, Tim J. Hudson
openssl Version: 1.1.1w	OpenSSL	Copyright (c) 1998-2025 The OpenSSL Project Authors Copyright (c) 1995-1998 Eric A. Young, Tim J. Hudson

Component, Version	License(s)	Copyright
FreeRTOS Version: V9.0.0	GPL-2.0-only	Copyright (c) 1998-2025 The OpenSSL Project Authors
expat Version: 2.1.0	MIT	Copyright (C) 2016 Real Time Engineers Ltd.
gnutls Version: 3.3.17.1	LGPL-2.1-or- later AND GPL-3.0-or- later	Copyright (c) 1998-2000 Thai Open Source Software Center Ltd and Clark Cooper
c-ares Version: 1.19.1	MIT	Copyright (C) 2007 Free Software Foundation, Inc.
platform/bionic Version: android-9.0.0_r59	Apache-2.0	Copyright (c) 2007 - 2018, Daniel Stenberg with many contributors, Copyright 1998 by the Massachusetts Institute of Technology.
external/gitlab.com/libeigen/eigen Version: upstream/3.3.4	MPL-2.0	Copyright (c) 2013 The NetBSD Foundation, Inc.
expat-debuginfo Version: 2.2.0	MIT	Copyright (c) The eigen Contributors
libpcap Version: libpcap-1.9.1	BSD-3- Clause	Copyright 2020 The Android Open Source Project
libexpat Version: R_2_5_0	MIT	Copyright (C) 2018 jingle YANG. All rights reserved.

Component, Version	License(s)	Copyright
platform_external_protobuf Version: android-vts-9.0_r6	BSD-3- Clause	Copyright (c) 1998-2000 Thai Open Source Software Center Ltd and Clark Cooper Copyright (c) 2001-2025 Expat maintainers
mbedtls Version: 2.12.0	Apache-2.0	Copyright 2008 Google Inc. All rights reserved.
libxml Version: 2.9.2	MIT	Copyright (c) The Mbed TLS Contributors
SQLite Version: 3.8.10.2	LicenseRef- SQLite	Copyright (C) 1998-2012 Daniel Veillard.
curl Version: 7.44.0	curl	Copyright (c) 2000-2023 by : D. Richard Hipp
device/generic/goldfish-opengl Version: android-cts-9.0_r18	Apache-2.0	Copyright (c) 1996–2025 Daniel Stenberg, and many contributors
Dnsmasq Version: 2.73	GPL-2.0-only	Copyright 2017 The Android Open Source Project
device/google/wahoo-kernel Version: android-wear-9.0.0_r16	Apache-2.0	Copyright (c) 2000-2023 by : Simon Kelley
device/generic/car Version: android-o-mr1-iot-release-1.0.5	Apache-2.0	Copyright 2017 The Android Open Source Project
device/generic/goldfish Version: android-vts-9.0_r14	Apache-2.0	Copyright 2017 The Android Open Source Project

Component, Version	License(s)	Copyright
protobuf-java Version: 3.0.0-beta-2	BSD-3- Clause	Copyright 2017 The Android Open Source Project
device/sample Version: android-9.0.0_r58	Apache-2.0	Copyright (c) Apache Maven
device/google/cuttlefish Version: android-9.0.0_r60	Apache-2.0	Copyright (C) 2021 The Android Open Source Project
device/google/cuttlefish_kernel Version: android-9.0.0_r17	Apache-2.0	Copyright 2017 The Android Open Source Project
device/google/cuttlefish/common Version: android-wear-9.0.0_r6	Apache-2.0	Copyright 2017 The Android Open Source Project
device/google/marlin-kernel Version: android-cts-9.0_r9	Apache-2.0	Copyright 2017 The Android Open Source Project
device/google/vrservices Version: android-wear-8.1.0_r1	Apache-2.0	Copyright 2017 The Android Open Source Project
device/google/wahoo Version: android-wear-9.0.0_r25	Apache-2.0	Copyright 2017 The Android Open Source Project
amazon-freertos Version: v1.1.0	MIT	Copyright 2017 The Android Open Source Project
bzip2 Version: 1.0.6	bzip2-1.0.6	Copyright (c) 2017 Amazon Web Services
glibc Version: 2.22.90	GPL-2.0-or- later	Copyright (c) 2001-2025 Expat maintainers

Component, Version	License(s)	Copyright
openssl Version: 3.0.13	Apache-2.0	Copyright (C) 1989, 1991 Free Software Foundation, Inc.
Mbed TLS Version: 2.12.0	Apache-2.0	Copyright (c) 1998-2023 The OpenSSL Project
device/generic/uml Version: android-9.0.0_r51	Apache-2.0	Copyright (c) The Mbed TLS Contributors
device/google/accessory/demokit Version: android-6.0.1_r43	Apache-2.0	Copyright 2017 The Android Open Source Project
pcap Version: 2.4.0	BSD-3- Clause	Copyright 2017 The Android Open Source Project
cjson Version: 1.7.15	MIT	Copyright (c) 1993, 1994, 1995, 1996, 1997 The Regents of the University of California.
curl Version: 7.65.1	curl	Copyright (c) 2009-2017 Dave Gamble and cJSON contributors
alsa-lib Version: 1.0.29	LGPL-2.1-or- later	Copyright (c) 1996 - 2019, Daniel Stenberg, daniel@haxx.se , and many contributors, see the THANKS file
eigen Version: 3.4	MPL-2.0	Copyright (C) 1991, 1999 Free Software Foundation, Inc.
cpp-httplib Version: v0.14.3	MIT	Copyright (c) The Eigen Project Authors

Component, Version	License(s)	Copyright
protobuf Version: 3.13.0	BSD-3- Clause	Copyright (c) 2017 yhirose
bzip2 Version: 1.0.7	bzip2-1.0.6	Copyright 2008 Google Inc.
boost Version: 1.71.0	BSL-1.0	Copyright (C) 1996-2010 Julian R Seward
json Version: 3.11.3	MIT	Copyright (c) T. Zachary Laine 2018
iproute2 Version: 3.16.0	GPL-2.0-only	Copyright © 2013-2022 Niels Lohmann
libselinux Version: 2.4	Unlicense	Copyright (C) 1989, 1991 Free Software Foundation, Inc.
sqlite-jdbc Version: 3.7.2	Apache-2.0	Copyright (C) 2003-2007 by : Red Hat, Inc.
sqlite4java Version: 0.282	Apache-2.0	Copyright (C) Xerial Project
tinyxml2 Version: 2.0.1	Zlib	Copyright (C) Igor Sereda
platform/frameworks/opt/vcard Version: android-8.0.0_r28	Apache-2.0	Copyright (c): the tinyxml2 Contributors
platform/frameworks/opt/telephony Version: android-security-9.0.0_r73	Apache-2.0	Copyright (C) 2010 The Android Open Source Project

Component, Version	License(s)	Copyright
platform/frameworks/opt/photoviewer Version: android-vts-8.0_r1	Apache-2.0	Copyright 2018 Google Inc. All rights reserved. Copyright (C) 2018 The Android Open Source Project
sqlite-amalgamation Version: 3.22.0	BSD-3- Clause	Copyright 2011; The Android Open Source Project Copyright (C) 2012 The Android Open Source Project
splunk-sdk-java Version: 0.1.0	Apache-2.0	Copyright (c) 2015; amir zamani
libffi Version: 3.2.1	MIT	Copyright (C), The splunk-sdk-java Team.
platform/packages/apps/DocumentsUI Version: android-security-9.0.0_r70	Apache-2.0	Copyright (c) 1996-2025 Anthony Green, Red Hat, Inc and others.
platform/packages/apps/Dialer Version: android-wear-9.0.0_r12	Apache-2.0	Copyright (C) 2019 The Android Open Source Project
platform/packages/apps/DevCamera Version: android-8.0.0_r13	Apache-2.0	Copyright (c) 2005-2008; The Android Open Source Project
platform/external/flac Version: android-p-preview-2	BSD-3- Clause	Copyright (C) 2016 The Android Open Source Project
platform/art Version: android-vts-9.0_r8	Apache-2.0	Copyright (C) 2000,2001,2002,2003,2004,2005,2006,2007 Josh Coalson

Component, Version	License(s)	Copyright
lz4 Version: v1.7.5	GPL-2.0-only	Copyright 2021 The Android Open Source Project
mali-driver Version: c90627f	GPL-2.0-or- later	Copyright (c) The Iz4 Contributors
platform/external/abi-compliance-checker Version: pie-cts-release	GPL-2.0-or- later OR LGPL-2.0-or- later Selected: LGPL-2.0-or- later	Copyright (c) The mali-driver Contributors
platform/external/adhd Version: android-cts-9.0_r15	BSD-3- Clause AND BSD-2- Clause	Copyright (C) 2009-2011 Institute for System Programming, RAS Copyright (C) 2011-2012 Nokia Corporation and/or its subsidiary(-ies) Copyright (C) 2011-2012 ROSA Laboratory Copyright (C) 2012-2016 Andrey Ponomarenko's ABI Laboratory All rights reserved.
platform/external/androidplot Version: android-13.0.0_r68	Apache-2.0	Copyright (c) 2010, Paul Hsieh All rights reserved.
platform/external/antlr Version: android-wear-9.0.0_r1	BSD-3- Clause	Copyright 2012 AndroidPlot.com
platform/external/apache-harmony Version: pie-platform-release	Apache-2.0	Copyright (c) 201 Terence Parr All rights reserved.

Component, Version	License(s)	Copyright
platform/external/avb Version: android-9.0.0_r40	MIT	Copyright 2001-2004 The Apache Software Foundation. Copyright 2001-2006 The Apache Software Foundation. Copyright 2003-2004 The Apache Software Foundation. Copyright 2004 The Apache Software Foundation.
platform/external/bouncycastle Version: android-9.0.0_r58	MIT	Copyright 2016, The Android Open Source Project
platform/external/bzip2 Version: android-9.0.0_r12	bzip2-1.0.6	Copyright (c) 2000-2015 The Legion of the Bouncy Castle Inc. (http://www.bouncycastle.org)
platform/external/caliper Version: oreo-vts-release	Apache-2.0	copyright (C) 1996-2010 Julian R Seward. All rights reserved.
platform/bootable/recovery Version: pie-qpr2-release	Apache-2.0	Copyright (C) 2013 Google Inc.
platform/external/aac Version: android-cts-9.0_r9	FDK-AAC	Copyright (c) 2005-2008, The Android Open Source Project
platform/external/hamcrest Version: android-o-mr1-iot-release-smart-display-r3	BSD-3- Clause	Copyright 1995 - 2018 Fraunhofer- Gesellschaft zur Förderung der angewandten Forschung e.V. All rights reserved.

Component, Version	License(s)	Copyright
pub/scm/linux/kernel/git/sergeh/libcap Version: libcap-2.12	BSD-3- Clause OR GPL-2.0-only Selected: BSD-3- Clause	Copyright (c) 2000-2006, www.hamcrest.org All rights reserved.
react-native-file-share-for-android Version: 1.0.3	MIT	Copyright (c) 1997,2007 Andrew G Morgan <morgan@kernel.org></morgan@kernel.org>
simplify Version: v1.2.0	GPL-3.0-only AND LicenseRef- Simplify- Commercial	Copyright (c) 2020 Balaji Rajendran
msgpack-c Version: 6.1.1	BSL-1.0	Copyright (C) 2007 Free Software Foundation, Inc.
websocketpp Version: 0.8.2	BSD-3- Clause AND Zlib AND MIT	Copyright (C) 2008-2015 FURUHASHI Sadayuki
soapdenovo2 Version: r241	GPL-3.0-or- later	Copyright (c) 2014, Peter Thorson
busybox Version: 1_24_1	GPL-2.0-only	Copyright (C), The soapdenovo2 Team.
catapult Version: 6f862e5	BSD-3- Clause	Copyright (c) The busybox Contributors

Component, Version	License(s)	Copyright
cglib Version: 3.1	Apache-2.0	Copyright (c) The catapult Contributors
platform/external/vulkan-validation-layers Version: android-security-9.0.0_r70	Apache-2.0	Copyright (c) The cglib Contributors
platform/external/walt Version: android-o-mr1-iot-release-smart-display-r3	Apache-2.0	Copyright (c) 2014-2016 The Khronos Group Inc. Copyright (c) 2015-2016 The Khronos Group Inc. copyrights of contributors appended Copyright 2015-2019 LunarG; Inc> copyright included. COPYRIGHT.txt for a full list of licenses used in this repository. Copyright 2008; Google Inc.
platform/external/webp Version: pie-s2-release	BSD-3- Clause	copyright to your changes; even after your contribution becomes part of our Copyright (C) 2015 The Android Open Source Project
platform/packages/apps/KeyChain Version: android-security-9.0.0_r75	Apache-2.0	copyright to your contribution; Copyright (c) 2010; Google Inc. All rights reserved. Copyright 2010 The Android Open Source Project
platform/packages/apps/Launcher2 Version: android-9.0.0_r42	Apache-2.0	Copyright 2011; The Android Open Source Project

Component, Version	License(s)	Copyright
platform/packages/apps/LegacyCamera Version: pie-dr1-release	Apache-2.0	Copyright (C) 2011 The Android Open Source Project Copyright (C) 2008 The Android Open Source Project Copyright (c) 2005-2008; The Android Open Source Project
platform/packages/apps/ManagedProvisioning Version: pie-r2-s2-release	Apache-2.0	Copyright (c) 2005-2008; The Android Open Source Project Copyright (c) 2005-2011; The Android Open Source Project
platform/external/vboot_reference Version: android11-mainline-extservices-release	BSD-3- Clause	Copyright (C) 2021 The Android Open Source Project
platform/external/vixl Version: android-cts-9.0_r6	BSD-3- Clause	Copyright 2015 The Chromium OS Authors. All rights reserved. Copyright (c) 2010 The Chromium OS Authors. All rights reserved.
platform/external/vogar Version: android-cts-9.0_r19	Apache-2.0	Copyright (C) 2016 The Android Open Source Project Copyright 2016; VIXL authors
slf4j Version: v_1.7.12	MIT	Copyright (C) 2014 The Android Open Source Project
dhexchange Version: master	MIT	Copyright (c) 2004-2022 QOS.ch Sarl (Switzerland)

Component, Version	License(s)	Copyright
cpython Version: v3.6.0b2	PSF-2.0	Copyright (c) 2015-2017 thecodeway.com
dagger Version: 1.2.1	Apache-2.0	Copyright © 2001 Python Software Foundation
chromiumos/third_party/arm-trusted-firmware Version: stabilize-smaug-7897.B	BSD-3- Clause	Copyright (c) The dagger Contributors
commons-codec Version: 1.9	Apache-2.0	Copyright (c) 2013-2015, ARM Limited and Contributors.
commons-codec Version: 1.6	Apache-2.0	Copyright (c) The commons-codec Contributors
commons-codec Version: 1.4	Apache-2.0	Copyright (c) The commons-codec Contributors
commons-collections Version: 3.2	Apache-2.0	Copyright (c) The commons-codec Contributors
commons-fileupload Version: 1.2.1	Apache-2.0	Copyright (c) The commons-collections Contributors
commons-io Version: 1.1	Apache-2.0	Copyright (c) The commons-fileupload Contributors
commons-io Version: 1.3.2	Apache-2.0	Copyright (c) The commons-io Contributors
commons-io Version: 2.4	Apache-2.0	Copyright (c) The commons-io Contributors

Component, Version	License(s)	Copyright
platform/frameworks/support Version: android-cts-9.0_r16	Apache-2.0	Copyright (c) The commons-io Contributors
platform/hardware/ril Version: android-vts-9.0_r7	Apache-2.0	Copyright (C) 1991; 1999 Free Software Foundation; Inc. (C); uiApplier) :- applier(C; uiApplier). Copyright (C) 2017 The Android Open Source Project (C) considered: Shared state
platform/libcore Version: android-9.0.0_r22	GPL-2.0-or- later AND GPL-2.0-with- classpath- exception	Copyright 2013 The Android Open Source Project Copyright (c) 2005-2008; The Android Open Source Project

Component, Version	License(s)	Copyright
platform/packages/apps/Camera2 Version: android-security-9.0.0_r68	Apache-2.0	Copyright (C) 1991; 1999 Free Software Foundation; Inc. Copyright (c) 2004; 2006-2014 Glenn Randers-Pehrson; and are Copyright (c) 2007 Oracle and or its affiliates. All rights reserved. copyright.html> Copyright (C) 2017 The Android Open Source Project Copyright (c) 2007; Oracle and or its affiliates. All rights reserved. Copyright (c) 2008; 2018; Oracle and or its affiliates. All rights reserved. Copyright 2006-2011; the V8 project authors. All rights reserved. Copyright (c) 2016; 2017; Oracle and or its affiliates. All rights reserved. Copyright (C) 1996-2023 by David Turner; Robert Wilhelm; and Werner Lemberg. Copyright (C) 2004-2015 Paul R. Holser; Jr. Copyright (C) 2021 The Android Open Source Project Copyright (c) 2002 Graz University of Technology. All rights reserved. Copyright 1991-2019 Unicode; Inc. All rights reserved. Copyright 1991-2019 Unicode; Inc. All rights reserved. Copyright (c) 2009-2013; Attila Szegedi Copyright (c) 2004; 2006-2011 Glenn

Component, Version	License(s)	Copyright
		Randers-Pehrson; and are Copyright 1999-2015 The Apache Software Foundation Copyright (c) 2010; 2018; Oracle and or its affiliates. All rights reserved. Copyright (C) 2014-2017 by Vitaly Puzrin and Andrei Tuputcyn Copyright (c) 1998-2011 Marti Maria Saguer Copyright 1991-2021 Unicode; Inc. All rights reserved. Copyright (c) 2000-2002; 2004; 2006-2016 Glenn Randers-Pehrson; are Copyright (c) 2004; 2006-2007 Glenn Randers-Pehrson; and are Copyright (c) 2003; 2020; Oracle and or its affiliates. All rights reserved. Copyright (c) 1998; 2022; Oracle and or its affiliates. All rights reserved. Copyright (c) 1998; 2013; Oracle and or its affiliates. All rights reserved. Copyright 1999-2020 The Apache Software Foundation Copyright (c) 2015; 2021; Oracle and or its affiliates. All rights reserved. Copyright-software-20021231 Copyright 2010-2022 Google; Inc. Copyright 1999-2018 The Apache Software Foundation Copyright (c) 2014; 2014; Oracle and or its affiliates. All rights reserved.

Component, Version	License(s)	Copyright
		Copyright 2010;2011;2012; 2013 Google; Inc. Copyright (c) 2005; 2018; Oracle and or its affiliates. All rights reserved. Copyright (c) 2012; 2018; Oracle and or its affiliates. All rights reserved. Copyright (c) 2015; Oracle and or its affiliates. All rights reserved. Copyright (C) 2018 The Android Open Source Project Copyright 1991-2018 Unicode; Inc. All rights reserved. Copyright (c) 1998; 2006; Oracle and or its affiliates. All rights reserved. Copyright 2006 The Apache Software Foundation. Copyright (c) 2013; 2018; Oracle and or its affiliates. All rights reserved. Copyright 1999-2023 Unicode; Inc. Copyright 1999-2023 Unicode; Inc. Copyright 2018-2023 Wim Taymans (C) 1995-2023 Jean-loup Gailly and Mark Adler Copyright (c) 1998-2020 Marti Maria Saguer Copyright (c) 2007; 2018; Oracle and or its affiliates. All rights reserved. (c) under Patent Claims infringed by Covered Software in the absence of Copyright (c) 2014; 2018; Oracle and or its affiliates. All rights reserved. Copyright (c) 2014; 2018; Oracle and or its affiliates. All rights reserved.

Component, Version	License(s)	Copyright
		affiliates. All rights reserved. Copyright 1991-2022 Unicode; Inc. All rights reserved. Copyright 2018;2019;2020 Ebrahim Byagowi Copyright (c) 2000-2002; 2004; 2006-2018 Glenn Randers-Pehrson; are Copyright Eastman Kodak Company 1991-2003 Copyright (c) 1998; 2018; Oracle and or its affiliates. All rights reserved. Copyright; lack of warranty; terms of distribution. Copyright (c) 1995-2023 The PNG Reference Library Authors. Copyright (c) 2002; 2018; Oracle and or its affiliates. All rights reserved. Copyright 1991-2016 Unicode; Inc. All rights reserved. Copyright JS Foundation and other contributors; https: js.foundation Copyright (c) 2016; Oracle and or its affiliates. All rights reserved. Copyright 2009 Sun Microsystems; Inc. All Rights Reserved. Copyright (C) 1995-2013 Jean-loup Gailly and Mark Adler Copyright (C) 2016; 2018; Oracle and or its affiliates. All rights reserved. Copyright (c) 2016; 2018; Oracle and or its affiliates. All rights reserved. Copyright (c) 2016; 2018; Oracle and or its affiliates. All rights reserved. Copyright (c) 1997 Eric S. Raymond Copyright (c) 1997 Eric S. Raymond

Component, Version	License(s)	Copyright
		Royal Government. Copyright (c) 1999-2004 David Corcoran <corcoran@linuxnet.com> Copyright (c) 2014; 2021; Oracle and or its affiliates. All rights reserved. Copyright (c) 1998; 2011; Oracle and or its affiliates. All rights reserved. Copyright (C) 2019 The Android Open Source Project Copyright (c) 1999-2003 David Corcoran <corcoran@musclecard.com> Copyright 1991-2012 Unicode; Inc. All rights reserved. Distributed under the Copyright (c) 2008; 2022; Oracle and or its affiliates. All rights reserved. Copyright (c) 2021; 2024; Oracle and or its affiliates. All rights reserved. Copyright (c) 2008; 2013; Oracle and or its affiliates. All rights reserved. Copyright (c) 1998; 2023; Oracle and or its affiliates. All rights reserved. Copyright 2005; 2016 jQuery Foundation; Inc. and other contributors Copyright (c) 2022 Alexander Temerev and contributors. Copyright (c) 2017; 2022; Oracle and or its affiliates. All rights reserved. Copyright (c) 2017; 2022; Oracle and or its affiliates. All rights reserved. Copyright 2005; 2013 jQuery Foundation; Inc. and other contributors (C) 1995-1998 Jean-loup Gailly and Mark Adler Copyright (c) 2002-2016; the original author</corcoran@musclecard.com></corcoran@linuxnet.com>

Component, Version	License(s)	Copyright
		or authors. Copyright (C) 1998-2023 Marti Maria Saguer Copyright (c) 2021; Oracle and or its affiliates. All rights reserved. Copyright 1996-1999 by Scott Hudson; Frank Flannery; C. Scott Ananian (C) 1995-2013 Jean-loup Gailly and Mark Adler (C) 1995-2010 Jean-loup Gailly and Mark Adler Copyright (c) 2001 freebxml.org. All rights reserved. Copyright (c) 2014; 2019; Oracle and or its affiliates. All rights reserved. Copyright (c) 2009; Oracle and or its affiliates. All rights reserved. Copyright (c) 2017; Oracle and or its affiliates. All rights reserved. Copyright OpenJS Foundation and other contributors; https: openjsf.org (c) Execute the make script:- Copyright (c) 2008 Oracle and or its affiliates. All rights reserved. Copyright 2010-2023 Google; Inc. (C) 2009 by Remo Dentato (rdentato@gmail.com) Copyright (c) 2000-2002; 2004; 2006-2017 Glenn Randers-Pehrson; are Copyright 2001;2003 Keith Packard Copyright (c) 1995-2005 The Cryptix Foundation Limited.

Component, Version	License(s)	Copyright
		Copyright (C) 1996-2022 by David Turner; Robert Wilhelm; and Werner Lemberg. Copyright (c) 1998; 2020; Oracle and or its affiliates. All rights reserved. Copyright (c) 1999-2003 David Corcoran <corcoran@linuxnet.com> Copyright 1996-2002; 2006 by Copyright (C) 1991-1998; Thomas G. Lane. Copyright (C) 2024 The Android Open Source Project Copyright (c) 2017; 2019; Oracle and or its affiliates. All rights reserved. Copyright OASIS Open 2020. All Rights Reserved. Copyright (c) 2022; Oracle and or its affiliates. All rights reserved. Copyright (c) 2013; Oracle and or its affiliates. All rights reserved. Copyright (c) 2013; Oracle and or its affiliates. All rights reserved. Copyright (c) 2001; Thai Open Source Software Center Ltd; Sun Microsystems. Copyright (C) 1995-2022 The PNG Reference Library Authors. Copyright (C) 2023 The Android Open Source Project Copyright (c) 1998-2016 Marti Maria Saguer Copyright (c) 2011;2012 Google; Inc. Copyright (c) 2002-2006; Marc Prud hommeaux <mwp1@cornell.edu> Copyright (c) 2008; 2021; Oracle and or its affiliates. All rights reserved. Copyright (c) 2008; 2021; Oracle and or its affiliates. All rights reserved.</mwp1@cornell.edu></corcoran@linuxnet.com>

Component, Version	License(s)	Copyright
		affiliates. All rights reserved. Copyright (c) 2000-2002; 2004; 2006-2015 Glenn Randers-Pehrson; are Copyright (c) 1998-2022 Marti Maria Saguer Copyright (C) 1989; 1991 Free Software Foundation; Inc. Copyright (c) 2021; 2023; Oracle and or its affiliates. All rights reserved. Copyright (c) 2004-2012 RELAXNG Copyright (C) 1995-2017 Jean-loup Gailly and Mark Adler Copyright (c) 2009-2016 Stuart Knightley; David Duponchel; Franz Buchinger; Ant nio Afonso Copyright (C) 1995-2022 Jean-loup Gailly and Mark Adler Copyright (C) 1998; 2019; Oracle and or its affiliates. All rights reserved. Copyright (p) 1998-2021 The Apache Software Foundation Copyright (c) 1997 Eric S. Raymond Copyright (c) 1998-2023 Marti Maria Saguer Copyright (C) 1998-2023 Marti Maria Saguer Copyright (C) 2017 JRuby Team Copyright (C) 2017 JRuby Team Copyright (C) 2017 JRuby Team Copyright (C) 2008; Oracle and or its affiliates. All rights reserved. Copyright 1998-2006 Sun Microsystems; Inc All Rights Reserved. Copyright (c) OASIS Open 2016. All Rights Reserved.

Component, Version	License(s)	Copyright
		Copyright 2005-2008 The Android Open Source Project Copyright 2005; 2018 jQuery Foundation; Inc. and other contributors Copyright (C) 2022 The Android Open Source Project Copyright 2004-2022 The Apache Software Foundation Copyright (c) 2009-2014 Stuart Knightley; David Duponchel; Franz Buchinger; Ant nio Afonso Copyright for winscard.h: Copyright (c) 2021; 2022; Oracle and or its affiliates. All rights reserved. Copyright (c) 2008; 2019; Oracle and or its affiliates. All rights reserved. (C) 1995-2022 Jean-loup Gailly and Mark Adler Copyright 1999-2010 The Apache Software Foundation Copyright (c) 2003; 2018; Oracle and or its affiliates. All rights reserved. Copyright (C) 1989; 1991 Free Software Foundation; Inc.; Copyright (C) 2003; International Business Machines Corporation and Copyright (c) 2017; 2018; Oracle and or its affiliates. All rights reserved. Copyright (c) 2017; 2018; Oracle and or its affiliates. All rights reserved. Copyright (C) 2007 Sun Microsystems; Inc. All Rights Reserved. Copyright (C) 2003 Copyright (C) 2003 Copyright (C) 2005; 2010 Thai Open Source

Component, Version	License(s)	Copyright
		Software Center Ltd Copyright 1996-2015 by Scott Hudson; Frank Flannery; C. Scott Ananian; Michael Petter Copyright 2012-2020; Bert Belder Copyright 2004 World Wide Web Consortium; (Massachusetts Institute of Technology; Copyright (c) 2004; 2019; Oracle and or its affiliates. All rights reserved. Copyright (c) 2005; 2017; Oracle and or its affiliates. All rights reserved. (C) 1995-2017 Jean-loup Gailly and Mark Adler Copyright (c) 1995-2019 The PNG Reference Library Authors. Copyright (c) 1998; 2012; Oracle and or its affiliates. All rights reserved. (C) 1995-2004 Jean-loup Gailly and Mark Adler Copyright (c) 2000-2011 France T I com Copyright (c) 2014; Oracle and or its affiliates. All rights reserved. Copyright (c) 2008; 2020; Oracle and or its affiliates. All rights reserved. Copyright (c) 1998; 2021; Oracle and or its affiliates. All rights reserved. Copyright 2004-2020 The Apache Software Foundation Copyright jQuery Foundation and other contributors; https: jquery.org

Component, Version	License(s)	Copyright
		Copyright (c) 2002-2018; the original author or authors. Copyright (c) 2008 Sun Microsystems; Inc. All Rights Reserved. Copyright 1991-2020 Unicode; Inc. All rights reserved. (c) 1999-2002; Lotus Development Corporation.; http: www.lotus.com. Copyright (c) 1998; 2016; Oracle and or its affiliates. All rights reserved. copyright for the files in src java.desktop unix native libawt_xawt: Copyright (c) 2017; 2020; Oracle and or its affiliates. All rights reserved. copyright (C) 1991-1998; Thomas G. Lane.
platform/packages/apps/Car/Dialer Version: android-vts-9.0_r13	Apache-2.0	Copyright (C) 2013 Google Inc. Copyright (C) 2023 The Android Open Source Project Copyright (c) 2005-2011; The Android Open Source Project
AhMyth Version: v1.0-beta.3b	GPL-3.0-only	Copyright (C) 2015 The Android Open Source Project Copyright (C) 2020 The Android Open Source Project
android-components Version: v0.44.0	MPL-2.0	Copyright (C) 2007 Free Software Foundation
android-mediabrowserservice Version: 6cf01be	Apache-2.0	Copyright (c) The android-components Contributors

Component, Version	License(s)	Copyright
android-platform-external-rappor Version: V0.1	Apache-2.0	Copyright (c) The android- mediabrowserservice Contributors
asio Version: 1.28.0	BSL-1.0	Copyright (c) The android-platform-external- rappor Contributors
platform/packages/apps/Car/Messenger Version: android-9.0.0_r44	Apache-2.0	Copyright (c) 2003-2023 Christopher M. Kohlhoff (chris at kohlhoff dot com)
platform/packages/apps/Car/Settings Version: android-9.0.0_r8	Apache-2.0	Copyright (C) 2021 The Android Open Source Project Copyright (C) 2017 The Android Open Source Project
platform/packages/apps/CellBroadcastReceiver Version: android-cts-9.0_r6	Apache-2.0	Copyright (C) 2019 The Android Open Source Project

Component, Version	License(s)	Copyright
platform/packages/apps/Contacts Version: android-wear-9.0.0_r11	Apache-2.0	Copyright (C) 2021 The Android Open Source Project Copyright 2011 The Android Open Source Project Copyright 2011; The Android Open Source Project Copyright (c) 2005-2008; The Android Open Source Project Copyright 2020 The Android Open Source Project Copyright 2016; The Android Open Source Project Copyright 2022; The Android Open Source Project Copyright (C) 2019 The Android Open Source Project
platform/external/valgrind Version: android-cts-9.0_r15	GPL-2.0-or- later AND Apache-2.0	copyright 2011 by Copyright (c) 2005-2008; The Android Open Source Project
easymock Version: 3.1	Apache-2.0	Copyright (C) 1989; 1991 Free Software Foundation; Inc. Copyright (C) 1989; 1991 Free Software Foundation; Inc.;
easymock Version: 3.3	Apache-2.0	Copyright (c) The easymock Contributors
emma Version: 2.0.5312	CPL-1.0	Copyright (c) The easymock Contributors

Component, Version	License(s)	Copyright
emma_ant Version: 2.0.5312	CPL-1.0	Copyright (c) The emma Contributors
commons-codec Version: 1.3	Apache-2.0	Copyright (c) 2017-2019 isis agora lovecruft.
boost Version: 1.86.0	BSL-1.0	Copyright (c) The commons-codec Contributors
platform_frameworks_support Version: android-r-preview-1	Apache-2.0	Copyright © 2025, Boost Team
platform_packages_apps_Settings Version: android-r-preview-1	Apache-2.0	Copyright (c) AOSP
platform_frameworks_base Version: android-r-preview-1	Apache-2.0	Copyright (c) AOSP
platform_system_core Version: android-r-preview-1	Apache-2.0	Copyright (c) AOSP
glib-2.0 Version: 2.44.0	LGPL-2.1-or- later	Copyright (c) AOSP
platform/external/skia Version: android-wear-8.0.0_r2	BSD-3- Clause	Copyright (C) 1995-1997 Peter Mattis, Spencer Kimball and Josh MacDonald

Component, Version	License(s)	Copyright
platform/external/sl4a Version: android-9.0.0_r18	Apache-2.0	Copyright (c) 2011 Google Inc. All rights reserved. Copyright (c) 2004; 2006-2014 Glenn Randers-Pehrson; and are copyright to your contribution; Copyright (C) 1998 Copyright (C) 1998 Copyright (C) 2017-2022 Advanced Micro Devices; Inc. All rights reserved. Copyright (C) 1994-2011 Lua.org; PUC-Rio Copyright (c) 2021 Google Inc. All rights reserved. copyrightable; but programs are; so by stripping all the Copyright (c) 2000-2002; 2004; 2006-2015 Glenn Randers-Pehrson; are Copyright (c) 2018 Google Inc. All rights reserved. copyrightable; but programs are; so by stripping all the programmatic Copyright 2014 The Chromium Authors. All rights reserved. Copyright (c) 2005-2008; The Android Open Source Project Copyright (C) 2017-2018 Advanced Micro Devices; Inc. All rights reserved. Copyright (C) [dates of first publication] Silicon Graphics; Inc. All Copyright (c) 2000-2002; 2004; 2006-2016 Glenn Randers-Pehrson;

Component, Version	License(s)	Copyright
platform/external/smali Version: android-vts-9.0_r11	Apache-2.0	Copyright (C) 2021 The Android Open Source Project Copyright (C) 2016 Google; Inc. Copyright (C) 2017 Google; Inc.
platform/external/okhttp Version: android-wear-9.0.0_r23	Apache-2.0	Copyright 2000-2014 JetBrains s.r.o.
platform/external/webview_support_interfaces Version: android-9.0.0_r53	Apache-2.0	Copyright (C) 2012 The Android Open Source Project
platform/external/wpa_supplicant_8 Version: aml_go_odp_330912000	BSD-3- Clause	Copyright 2018 The Chromium Authors
platform/external/wycheproof Version: android-cts-8.1_r5	Apache-2.0	Copyright (c) 2002-2012; Jouni Malinen <j@w1.fi> and contributors Copyright (c) 2002-2022; Jouni Malinen <j@w1.fi> and contributors</j@w1.fi></j@w1.fi>
platform/external/x264 Version: oreo-mr1-cuttlefish-testing	GPL-2.0-or- later	copyright to your changes; even after your contribution becomes part of our Copyright (C) 2017 The Android Open Source Project
platform/external/zopfli Version: pie-dr1-release	Apache-2.0	Copyright (C) 1989; 1991 Free Software Foundation; Inc.
platform/frameworks/data-binding Version: android-security-8.0.0_r53	Apache-2.0	Copyright 2011 Google Inc.

Component, Version	License(s)	Copyright
platform/frameworks/hardware/interfaces Version: android-security-9.0.0_r69	Apache-2.0	Copyright (C) 2015 The Android Open Source Project Copyright (c) 2005-2017; The Android Open Source Project
platform/frameworks/opt/bitmap Version: android-5.1.1_r36	Apache-2.0	Copyright (C) 2021 The Android Open Source Project Copyright (C) 2016 The Android Open Source Project Copyright (C) 2018 The Android Open Source Project Copyright (C) 2023 The Android Open Source Project Copyright (C) 2017 The Android Open Source Project Copyright (C) 2022 The Android Open Source Project Copyright (C) 2020 The Android Open Source Project Copyright (C) 2019 The Android Open Source Project Copyright (C) 2019 The Android Open Source Project
platform/frameworks/opt/chips Version: android-security-9.0.0_r65	Apache-2.0	Copyright (C) 2013 The Android Open Source Project
platform/external/robolectric-shadows Version: android-9.0.0_r50	MIT	Copyright (C) 2011 The Android Open Source Project Copyright (C) 2013 The Android Open Source Project

Component, Version	License(s)	Copyright
platform/external/seccomp-tests Version: android-p-preview-1	GPL-2.0-only	Copyright (c) 2010 Xtreme Labs, Pivotal Labs and Google Inc.
platform/external/selinux Version: android-9.0.0_r55	GPL-2.0-or- later	Copyright (C) 1989, 1991 Free Software Foundation, Inc.
platform/external/sfntly Version: android-9.0.0_r11	Apache-2.0	Copyright (C) 1991; 1999 Free Software Foundation; Inc. Copyright (C) 1989; 1991 Free Software Foundation; Inc. Copyright 2011 Tresys Technology; LLC. All rights reserved. Copyright (C) 2020 The Android Open Source Project (c) The contribution was provided directly to me by some other
device/linaro/bootloader/OpenPlatformPkg Version: android-wear-9.0.0_r3	Apache-2.0	Copyright 2011 Google Inc
platform/system/update_engine Version: android-wear-9.0.0_r30	Apache-2.0	Copyright (c) 2012, Linaro Ltd.
platform/external/nist-pkits Version: android-7.1.1_r39	Apache-2.0	Copyright 2022 Google LLC Copyright (C) 2015 The Android Open Source Project Copyright (C) 2022 The Android Open Source Project Copyright (C) 2020 The Android Open Source Project

Component, Version	License(s)	Copyright
platform/system/security Version: android-vts-9.0_r4	Apache-2.0	Copyright (C) 2013 The Android Open Source Project
platform/system/timezone Version: android-vts-9.0_r16	Apache-2.0	Copyright 2021 The Android Open Source Project Copyright (C) 2021 The Android Open Source Project Copyright (C) 2023 The Android Open Source Project Copyright (c) 2008-2015; The Android Open Source Project Copyright 2020; The Android Open Source Project Copyright 2021; The Android Open Source Project Copyright (C) 2022 The Android Open Source Project Copyright 2022; The Android Open Source Project Copyright 2023; The Android Open Source Project Copyright (C) 2020 The Android Open Source Project Copyright (C) 2020 The Android Open Source Project Copyright (C) 2012 The Android Open Source Project

Component, Version	License(s)	Copyright
platform/system/tpm Version: android-9.0.0_r1	Apache-2.0	Copyright (C) 2021 The Android Open Source Project Copyright 1991-2020 Unicode; Inc. All rights reserved. Copyright (C) 2018 The Android Open Source Project Copyright 1991-2018 Unicode; Inc. All rights reserved. Copyright (C) 2015 The Android Open Source Project Copyright (C) 2017 The Android Open Source Project Copyright (C) 2020 The Android Open Source Project Copyright (C) 2019 The Android Open Source Project Copyright (C) 2019 The Android Open Source Project
external/gmock Version: master	BSD-3- Clause	Copyright (c) 2014-2015; The Android Open Source Project Copyright 2017 Google Inc. All rights reserved.
external/jsr-305 Version: master	BSD-3- Clause	Copyright 2008, Google Inc.
platform/system/bt Version: pie-r2-s2-release	Apache-2.0	Copyright 2008, Google Inc.

Component, Version	License(s)	Copyright
platform/system/chre Version: android-wear-9.0.0_r26	Apache-2.0	copyright header] Copyright (C) 2015 The Android Open Source Project Copyright 2017 The Android Open Source Project Copyright (C) 2017 The Android Open Source Project Copyright 2015 The Android Open Source Project
platform/system/connectivity/wificond Version: android-security-9.0.0_r69	Apache-2.0	Copyright (C) 2019 Google Inc. Copyright (C) 2021 The Android Open Source Project Copyright (C) 2016 The Android Open Source Project Copyright (C) 2023 The Android Open Source Project Copyright (C) 2020 Google Inc. Copyright (C) 2017 The Android Open Source Project Copyright (C) 2022 The Android Open Source Project Copyright (C) 2020 The Android Open Source Project Copyright (C) 2019 The Android Open Source Project Copyright (C) 2019 The Android Open Source Project Copyright (C) 2003-2010 Mark Borgerding Copyright (C) 2016-2017; The Android Open Source Project

Component, Version	License(s)	Copyright
platform/system/extras Version: android-9.0.0_r60	Apache-2.0	Copyright (C) 2016 The Android Open Source Project

Component, Version	License(s)	Copyright
platform/system/keymaster Version: android-9.0.0_r39	Apache-2.0	Copyright (c) 2017; The Android Open Source Project Copyright 2007 The Android Open Source Project Copyright 2017 The Android Open Source Project Copyright (C) 2017 The Android Open Source Project Copyright (c) 2010; The Android Open Source Project Copyright (C) 2022 The Android Open Source Project Copyright (c) 2015; The Android Open Source Project Copyright (c) 2015; The Android Open Source Project Copyright (c) 2014; The Android Open Source Project Copyright (c) 2013; The Android Open Source Project Copyright (c) 2012; The Android Open Source Project Copyright (C) 2021 The Android Open Source Project Copyright (C) 2011 The Android Open Source Project Copyright (C) 2005-2008; The Android Open Source Project Copyright (C) 2019 The Android Open Source Project Copyright (C) 2009 The Android Open

Component, Version	License(s)	Copyright
		Source Project
		Copyright (C) 2014 The Android Open
		Source Project
		Copyright (C) 2016 The Android Open
		Source Project
		Copyright (C) 2023 The Android Open
		Source Project
		Copyright (C) 2013 The Android Open
		Source Project
		Copyright 2010 The Android Open Source
		Project
		Copyright (c) 2005-2015; The Android Oper
		Source Project
		Copyright (c) 2013-2015; The Android Ope
		Source Project
		Copyright (c) 2008; The Android Open Source Project
		Copyright 2018 The Android Open Source
		Project
		Copyright 2006 The Android Open Source
		Project
		Copyright 2016 The Android Open Source
		Project
		Copyright (C) 2008 The Android Open
		Source Project
		Copyright (C) 2018 The Android Open
		Source Project
		Copyright 2013 The Android Open Source
		Project
		Copyright (c) 2020; The Android Open
		Source Project
		Copyright (C) 2015 The Android Open

Component, Version	License(s)	Copyright
		Source Project Copyright (C) 2010 The Android Open Source Project Copyright (C) 2020 The Android Open Source Project
platform/system/libufdt Version: android-9.0.0_r57	Apache-2.0	Copyright (c) 2005-2015, The Android Open Source Project
platform/system/netd Version: android-cts-9.0_r10	Apache-2.0	Copyright (C) 2021 The Android Open Source Project Copyright (c) 2005-2015; The Android Open Source Project Copyright (C) 2014 The Android Open Source Project
platform/system/nvram Version: android-cts-8.1_r10	Apache-2.0	Copyright (C) 2018 The Android Open Source Project Copyright (C) 2017 The Android Open Source Project Copyright (C) 1995; 1996; 1997; and 1998 WIDE Project. Copyright (C) 2019 The Android Open Source Project
platform/external/objenesis Version: oreo-m5-release	Apache-2.0	Copyright (C) 2016 The Android Open Source Project Copyright (C) 2016 The Android Open- Source Project
platform/external/oj-libjdwp Version: android-cts-9.0_r12	GPL-2.0-only	Copyright (C) 2013 The Android Open Source Project

Component, Version	License(s)	Copyright
iputils Version: s20121221	BSD-3- Clause OR GPL-2.0-or- later Selected: BSD-3- Clause	Copyright (C) 1989, 1991 Free Software Foundation, Inc.
platform/external/libopus Version: android-9.0.0_r5	BSD-3- Clause	Copyright (c) 1985, 1993 The Regents of the University of California. All rights reserved.
platform/external/libphonenumber Version: pie-b4s4-release	Apache-2.0	Copyright (c) 2011 Xiph.Org Foundation
platform/external/libpng Version: android11-gsi	Apache-2.0	Copyright (C) 2014 The Android Open Source Project
platform/external/snakeyaml Version: android-cts-7.0_r2	Apache-2.0	Copyright (C) 2007 The Android Open Source Project
platform/external/speex Version: android-security-9.0.0_r64	BSD-3- Clause	Copyright (C) 2017 The Android Open Source Project Copyright (C) 2010 The Android Open Source Project copyrighted by me (Ben Gruver) Copyright 2011; Google Inc. Copyright (C) 2014 The Android Open Source Project

Component, Version	License(s)	Copyright
platform/external/spirv-llvm Version: android-security-9.0.0_r69	NCSA	Copyright (C) 2006-2008 CSIRO; Jean-Marc Valin; Xiph.Org Foundation Copyright 1992; 1993; 1994 by Jutta Degener and Carsten Bormann; Copyright (C) 2008 Thorvald Natvig Copyright (C) 2003 Epic Games Copyright (C) 2004-2006 Epic Games Copyright (C) 2002 Jean-Marc Valin David Rowe Copyright (C) 2005 Analog Devices Copyright (C) 2005-2007; Jean-Marc Valin Copyright (C) 2003 Epic Games (written by Jean-Marc Valin) Copyright (C) 2006 David Rowe Copyright (C) 2011 Jyri Sarha; Texas Instruments Copyright (C) 2003-2004; Mark Borgerding Copyright (C) 2005 Jean-Marc Valin; CSIRO; Christopher Montgomery Copyright (C) 2002-2008 Jean-Marc Valin
platform/external/strace Version: android-wear-9.0.0_r31	BSD-3- Clause	Copyright (c) 2003-2015 University of Illinois at Urbana-Champaign.
platform/external/swiftshader Version: android-cts-9.0_r15	Apache-2.0	Copyright (C) 2006 The Android Open Source Project Copyright (c) 1991; 1992 Paul Kranenburg <pk@cs.few.eur.nl> COPYRIGHT for details. COPYRIGHT NEWS PORTING README</pk@cs.few.eur.nl>

Component, Version	License(s)	Copyright
platform/external/trappy Version: android-cts-9.0_r17	Apache-2.0	Copyright (c) 2014-2019 The Khronos Group Inc.; Copyright (c) 2003-2016 University of Illinois at Urbana-Champaign. Copyright (c) 2006 Kirill Simonov Copyright (c) 2014-2020 The Khronos Group Inc.; Copyright 2008; Google Inc. Copyright (c) 2003-2018 University of Illinois at Urbana-Champaign. Copyright (c) 2007-2018 University of Illinois at Urbana-Champaign. Copyrights and other intellectual property rights therein. Copyright (c) 2015-2016 The Khronos Group Inc. Copyright (c) 2015-2018 The Khronos Group Inc. copyright purposes are listed in AUTHORS.txt. Copyright (C) 2019 The Android Open Source Project Copyright to your contribution; copyrights and restrictions: Copyright (c) 2014-2016 The Khronos Group Inc.; Copyright (C) 2018 The Android Open Source Project

Component, Version	License(s)	Copyright
		copyright to your changes; even after your contribution becomes part of our Copyright (c) 2017 The Khronos Group Inc.; Copyright (c) 2018 The Khronos Group Inc.; Copyright License. Subject to the terms and conditions of this copyright purposes are listed in AUTHORS.txt. Copyright (C) 2020 The Android Open Source Project Copyright (c) 2003-2011 University of Illinois at Urbana-Champaign. Copyright (c) 2014-2018 The Khronos Group Inc.;
platform/external/turbine Version: android-cts-9.0_r14	Apache-2.0	Copyright 2015-2017 ARM Limited
platform/external/universal-tween-engine Version: android-8.1.0_r38	Apache-2.0	Copyright 2020 Google Inc. Copyright (C) 2017 The Android Open Source Project
platform/external/v8 Version: android-security-9.0.0_r66	BSD-3- Clause	Copyright (C) 2016 The Android Open Source Project

Component, Version	License(s)	Copyright
platform/external/mksh Version: android-cts-9.0_r18	MirOS	Copyright (C) 1993-2004 by Sun Microsystems; Inc. All rights reserved. Copyright (C) 2000-2007 Julian Seward. All rights reserved. Copyright 2014; the V8 project authors. All rights reserved. Copyright (c) 1994-2006 Sun Microsystems Inc. Copyright 2006-2011; the V8 project authors. All rights reserved.
platform/external/mockftpserver Version: android-cts-6.0_r18	Apache-2.0	Copyright © 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013 Thorsten Glaser <tg@mirbsd.org></tg@mirbsd.org>
platform/external/nanopb-c Version: android-wear-p-preview-2	Zlib	Copyright 2007 the original author or authors.
platform/external/jsr305 Version: android-9.0.0_r41	BSD-3- Clause	Copyright (c) 2011 Petteri Aimonen <jpa at="" nanopb.mail.kapsi.fi=""></jpa>
platform/external/one-true-awk Version: android-cts-9.0_r18	LPL-1.0 OR LPL-1.02 Selected: LPL-1.02	Copyright (c) 2007-2009, JSR305 expert group All rights reserved.
platform/external/owasp/sanitizer Version: android-9.0.0_r2	BSD-3- Clause	Copyright (C) Lucent Technologies 1997 All Rights Reserved
platform/external/parameter-framework Version: android-cts-7.0_r15	BSD-3- Clause	Copyright (c) 2011, Mike Samuel All rights reserved.

Component, Version	License(s)	Copyright
platform/external/pcre Version: android-8.0.0_r16	BSD-3- Clause	Copyright 2014 PDFium Authors. All rights reserved.
platform/external/pdfium Version: android-wear-9.0.0_r14	Apache-2.0	Copyright (c) 1997-2014 University of Cambridge Copyright(c) 2010-2014 Zoltan Herczeg Copyright(c) 2009-2014 Zoltan Herczeg Copyright (c) 2007-2012, Google Inc.
platform/external/piex Version: android-cts-9.0_r5	Apache-2.0	Copyright 2014 PDFium Authors. All rights reserved.
platform/external/ply Version: android-9.0.0_r20	BSD-3- Clause	Copyright 2015 Google Inc
platform/external/python/cpython3 Version: android-9.0.0_r31	Python-2.0.1	Copyright (C) 2001-2017 David M. Beazley (Dabeaz LLC) All rights reserved.
platform/external/robolectric Version: oreo-m2-s1-release	MIT	Copyright (c) 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017 Python Software Foundation. All rights reserved.
platform/external/libjpeg-turbo Version: android-o-mr1-iot-release-1.0.0	BSD-3- Clause	Copyright (c) 2010 Xtreme Labs and Pivotal Labs

Component, Version	License(s)	Copyright
platform/external/libldac Version: android-cts-8.0_r19	Apache-2.0	Copyright (C) 1991-1996, Thomas G. Lane. Copyright (C) 2015, D. R. Commander. Copyright (C) 1994-1997, Thomas G. Lane. Copyright (C) 2014, D. R. Commander.
platform/external/libmojo Version: android-cts-9.0_r9	BSD-3- Clause	Copyright (C) 2013 - 2016 Sony Corporation
platform/external/libnetfilter_conntrack Version: android-vts-9.0_r19	GPL-2.0-or- later	Copyright 2016 The Chromium Authors. All rights reserved.
external/anongit.freedesktop.org/git/wayland/wayland- protocols Version: 1.1	MIT	Copyright (C) 1989, 1991 Free Software Foundation, Inc.
intellij-community Version: goland	Apache-2.0	Copyright © 2008-2013 Kristian Høgsberg Copyright © 2010-2013 Intel Corporation Copyright © 2013 Rafael Antognolli Copyright © 2013 Jasper St. Pierre Copyright © 2014 Jonas Ådahl Copyright © 2014 Jason Ekstrand Copyright © 2014-2015 Collabora, Ltd. Copyright © 2015 Red Hat Inc.
platform/external/guice Version: pie-dr1-release	Apache-2.0	Copyright (C) JetBrains s.r.o.
platform/external/libvncserver Version: android-8.1.0_r33	GPL-2.0-or- later	Copyright (C) 2016 The Android Open Source Project

Component, Version	License(s)	Copyright
platform/external/libvpx Version: android-vts-9.0_r11	BSD-3- Clause	Copyright (C) 1989, 1991 Free Software Foundation, Inc.
platform/external/libvterm Version: android-7.0.0_r13	MIT	Copyright (c) 2010, The WebM Project authors. All rights reserved.
platform/external/libyuv Version: android-wear-9.0.0_r18	BSD-3- Clause	Copyright (c) 2008 Paul Evans
platform/external/llvm Version: o-mr1-iot-preview-7	BSD-3- Clause	Copyright 2011 The LibYuv Project Authors. All rights reserved.
platform/external/lmfit Version: android-8.1.0_r65	BSD-3- Clause	Copyright (c) 2003-2014 University of Illinois at Urbana-Champaign. All rights reserved.
platform/external/lz4 Version: android-vts-9.0_r18	BSD-2- Clause	Copyright (c) 1980-1999 University of Chicago, as operator of Argonne National Laboratory Copyright (c) 2004-2015 Joachim Wuttke, Forschungszentrum Juelich GmbH All rights reserved.
platform/external/markdown Version: jb-mr1-dev-plus-aosp	BSD-3- Clause	Copyright (C) 2015 The Android Open Source Project

Component, Version	License(s)	Copyright
platform/external/mesa3d Version: android-9.0.0_r36	MIT	Copyright 2007, 2008 The Python Markdown Project (v. 1.7 and later) Copyright 2004, 2005, 2006 Yuri Takhteyev (v. 0.2-1.6b) Copyright 2004 Manfred Stienstra (the original version) All rights reserved.
platform/external/jarjar Version: android-8.0.0_r51	Apache-2.0	Copyright © 2016 Red Hat. Copyright © 2016 Mauro Rossi <issor.oruam@gmail.com></issor.oruam@gmail.com>
platform/external/javasqlite Version: android-cts-9.0_r4	BSD-3- Clause	Copyright (C) 2014 The Android Open Source Project
platform/external/jcommander Version: android-vts-9.0_r9	MIT	Copyright 2007, The Android Open Source Project
platform/external/jdiff Version: android-wear-9.0.0_r4	LGPL-2.0-or- later	Copyright (C) 2016 The Android Open Source Project
platform/external/jemalloc Version: android-vts-9.0_r11	BSD-2- Clause	Copyright (C) 1991, 1999 Free Software Foundation, Inc.
platform/external/jmdns Version: android-cts-6.0_r22	Apache-2.0	Copyright (C) 2002-2016 Jason Evans <jasone@canonware.com>. All rights reserved. Copyright (C) 2007-2012 Mozilla Foundation. All rights reserved. Copyright (C) 2009-2016 Facebook, Inc. All rights reserved.</jasone@canonware.com>

Component, Version	License(s)	Copyright
platform/external/kernel-headers Version: pie-r2-s2-release	GPL-2.0-or- later	Copyright 2011, The Android Open Source Project
platform/external/ksoap2 Version: oreo-m2-release	MIT	Copyright (C) 1989, 1991 Free Software Foundation, Inc.
platform/external/libavc Version: android-cts-9.0_r16	Apache-2.0	Copyright (c) 2003,2004 Stefan Haustein, Oberhausen, Rhld., Germany Copyright (c) 2006, James Seigel, Calgary, AB., Canada
platform/external/libbackup Version: oreo-mr1-release	Apache-2.0	Copyright (C) 2015 The Android Open Source Project
platform/external/libbrillo Version: pie-s2-release	Apache-2.0	Copyright 2016-2017 Google Inc.
platform/external/libcap Version: android-9.0.0_r21	BSD-3- Clause	Copyright 2014 The Chromium OS Authors. All rights reserved.
platform/external/libcap-ng Version: android10-mainline-resolv-release	LGPL-2.1- only	Copyright (C) 1989, 1991 Free Software Foundation, Inc.
platform/external/libhevc Version: android-cts-9.0_r18	Apache-2.0	Copyright (C) 1989, 1991 Free Software Foundation, Inc.
platform/external/flatbuffers Version: pie-cuttlefish-testing	BSD-3- Clause	Copyright (C) 2012 Ittiam Systems Pvt Ltd, Bangalore
platform/external/fonttools Version: android-vts-8.1_r4	MIT	Copyright (C) 2017 The Android Open Source Project

Component, Version	License(s)	Copyright
platform/external/glide Version: android-cts-8.1_r13	MIT	Copyright 1999-2004 by Just van Rossum, Letterror, The Netherlands.
platform/external/golang-protobuf Version: android-vts-9.0_r17	Apache-2.0	Copyright (C) 2011 The Android Open Source Project
haxRat Version: 902007a	GPL-3.0-or- later	Copyright 2010 The Go Authors. All rights reserved.https://github.com/golang/protobuf
joda-time Version: v2.12.2	Apache-2.0	Copyright (C) The haxRat Contributors
platform/external/google-tv-pairing-protocol Version: main	Apache-2.0	Copyright 2001-2013 Stephen Colebourne
platform/external/guava Version: android-8.0.0_r40	Apache-2.0	Copyright 2012 Google Inc. All Rights Reserved.
platform/packages/apps/Tag Version: pie-cts-release	Apache-2.0	Copyright (C) 2010 The Android Open Source Project
platform/packages/apps/Terminal Version: pie-b4s4-dev	Apache-2.0	Copyright (C) 2018 The Android Open Source Project
platform/packages/apps/TimeZoneUpdater Version: android-9.0.0_r16	Apache-2.0	Copyright (C) 2013 The Android Open Source Project
platform/packages/apps/Traceur Version: android-9.0.0_r56	Apache-2.0	Copyright (C) 2017 The Android Open Source Project Copyright (c) 2005-2017; The Android Open Source Project

Component, Version	License(s)	Copyright
platform/packages/inputmethods/LatinIME Version: android-wear-9.0.0_r4	Apache-2.0	Copyright (C) 2018 The Android Open Source Project
platform/packages/inputmethods/OpenWnn Version: android-6.0.1_r78	Apache-2.0	Copyright (C) 2011 The Android Open Source Project Copyright (C) 2018 The Android Open Source Project Copyright (C) 2013 The Android Open Source Project Copyright (c) 2008; The Android Open Source Project Copyright (C) 2012 The Android Open Source Project Copyright (C) 2014 The Android Open Source Project
platform/packages/providers/BlockedNumberProvider Version: android-wear-9.0.0_r14	Apache-2.0	Copyright (C) 2008;2009 OMRON SOFTWARE Co.; Ltd.
platform/packages/providers/BookmarkProvider Version: android-7.1.1_r38	Apache-2.0	Copyright (c) 2005-2016; The Android Open Source Project
platform/packages/services/Car Version: android-vts-9.0_r15	Apache-2.0	Copyright (C) 2019 The Android Open Source Project

Component, Version	License(s)	Copyright
platform/packages/services/Mms Version: pie-qpr1-s2-release	Apache-2.0	Copyright 2021 The Android Open Source Project Copyright (C) 2016 The Android Open Source Project Copyright (C) 2023 The Android Open Source Project Copyright (c) 2019; The Android Open Source Project Copyright (C) 2017 The Android Open Source Project Copyright (C) 2022 The Android Open Source Project Copyright (C) 2021 The Android Open Source Project Copyright (C) 2021 The Android Open Source Project Copyright (C) 2018 The Android Open Source Project Copyright (C) 2015 The Android Open Source Project Copyright (C) 2015 The Android Open Source Project Copyright (C) 2020 The Android Open Source Project Copyright (C) 2019 The Android Open Source Project Copyright (C) 2019 The Android Open Source Project
platform/packages/services/Telecomm Version: android-9.0.0_r18	Apache-2.0	Copyright (C) 2022 The Android Open Source Project Copyright (C) 2014 The Android Open Source Project

Component, Version	License(s)	Copyright
platform/sdk Version: android-wear-9.0.0_r32	Apache-2.0	Copyright (C) 2021 The Android Open Source Project Copyright (C) 2013 The Android Open Source Project Copyright (C) 2022 The Android Open Source Project Copyright (C) 2019 The Android Open Source Project
platform/external/compiler-rt Version: android-9.0.0_r35	BSD-3- Clause	Copyright 2007; The Android Open Source Project Copyright (C) 2008 The Android Open Source Project Copyright (c) 2005-2008; The Android Open Source Project Copyright 2007 The Android Open Source Project Copyright (c) 2005-2011; The Android Open Source Project Copyright (c) 2011; The Android Open Source Project Copyright (c) 2011; The Android Open Source Project Copyright (c) 2005-2014; The Android Open Source Project Copyright (c) 2012-2014; The Android Open Source Project Copyright rights in its Contribution; if any; to grant the copyright
platform/external/crcalc Version: o-mr1-iot-preview-8	Apache-2.0	Copyright (c) 2009-2014 by the contributors listed in CREDITS.TXT

Component, Version	License(s)	Copyright
platform/external/cros/system_api Version: android-9.0.0_r43	BSD-3- Clause	Copyright (C) 2015 The Android Open Source Project
platform/external/junit Version: android-wear-9.0.0_r33	EPL-1.0	Copyright 2015 The Chromium OS Authors. All rights reserved.
platform/external/jacoco Version: android-security-9.0.0_r68	EPL-1.0	Copyright (C) 2007 The Android Open Source Project
platform/external/capstone Version: android-wear-9.0.0_r7	BSD-3- Clause	Copyright (c) 2009, 2015 Mountainminds GmbH & Co. KG and Contributors
platform/external/chromium-trace Version: android-9.0.0_r7	BSD-3- Clause	Copyright (c) 2013, COSEINC. All rights reserved.
platform/external/clang Version: android-9.0.0_r21	BSD-3- Clause	Copyright (c) 2012 The Chromium Authors. All rights reserved.
platform/external/cn-cbor Version: android-security-9.0.0_r76	MIT	Copyright (c) 2007-2016 University of Illinois at Urbana-Champaign. All rights reserved.
platform/packages/providers/CallLogProvider Version: pie-release	Apache-2.0	Copyright (c) 2015 Carsten Bormann <cabo@tzi.org></cabo@tzi.org>
platform/packages/providers/TelephonyProvider Version: pie-release-2	Apache-2.0	Copyright (c) 2015; The Android Open Source Project
platform/packages/services/BuiltInPrintService Version: android-wear-9.0.0_r21	Apache-2.0	Copyright (c) 2005-2008; The Android Open Source Project Copyright (C) 2019 The Android Open Source Project

Component, Version	License(s)	Copyright
platform_external_freetype Version: android-9.0.0_r40	MIT	Copyright (C) 2016 The Android Open Source Project
platform_frameworks_base Version: android-wear-9.0.0_r8	BSD-3- Clause	Copyright (C) 2008-2023 by David Turner, Robert Wilhelm, and Werner Lemberg.
platform_frameworks_support Version: android-cts-9.0_r1	Apache-2.0	Copyright 2005-2008 The Android Open Source Project
libxml2-debugsource Version: 2.9.13	MIT	Copyright (C) 2014 The Android Open Source Project
lk Version: 3446309	MIT	Copyright (C) 1998-2012 Daniel Veillard. All Rights Reserved. Copyright (C) The Libxml2 Contributors.
Ilvm Version: Ilvmorg-3.9.1	NCSA	Copyright (c) The lk Contributors
opae-sdk Version: 1.3.6-4	BSD-3- Clause	Copyright (c) The Ilvm Contributors
platform/packages/apps/StorageManager Version: android-9.0.0_r48	Apache-2.0	Copyright(c) 2017, Intel Corporation
platform/external/harfbuzz_ng Version: pie-b4s4-dev	MIT	Copyright (C) 2016 The Android Open Source Project

Component, Version	License(s)	Copyright
platform/external/honggfuzz Version: android-wear-9.0.0_r14	MIT	Copyright © 2010,2011,2012 Google, Inc. Copyright © 2012 Mozilla Foundation Copyright © 2011 Codethink Limited Copyright © 2008,2010 Nokia Corporation and/or its subsidiary(-ies) Copyright © 2009 Keith Stribley Copyright © 2009 Martin Hosken and SIL International Copyright © 2007 Chris Wilson Copyright © 2006 Behdad Esfahbod Copyright © 2005 David Turner Copyright © 2004,2007,2008,2009,2010 Red Hat, Inc. Copyright © 1998-2004 David Turner and Werner Lemberg
platform/external/icu Version: android-security-9.0.0_r66	BSD-3- Clause	Copyright 2010-2015 by Google Inc. All Rights Reserved.
platform/external/ImageMagick Version: android-cts-9.0_r5	Apache-2.0	Copyright (c) 1995-2015 International Business Machines Corporation and others
platform/external/iproute2 Version: android-9.0.0_r39	GPL-2.0-or- later	Copyright 1999-2016 ImageMagick Studio LLC, a non-profit organization dedicated to making software imaging solutions freely available.
platform/external/ipsec-tools Version: android-cts-6.0_r7	BSD-3- Clause	Copyright (C) 1989, 1991 Free Software Foundation, Inc.

Component, Version	License(s)	Copyright
platform/external/iptables Version: android-wear-9.0.0_r5	GPL-2.0-or- later	Copyright (C) 1995, 1996, 1997, and 1998 WIDE Project. All rights reserved.
libpcap Version: 1.6.2	BSD-3- Clause	Copyright (C) 1989, 1991 Free Software Foundation, Inc.
platform/packages/apps/EmergencyInfo Version: android-wear-9.0.0_r8	Apache-2.0	Copyright (c) 1993-1997 The Regents of the University of California
platform/packages/apps/ExactCalculator Version: android-9.0.0_r21	Apache-2.0	Copyright (C) 2021 The Android Open Source Project Copyright (C) 2016 The Android Open Source Project Copyright (C) 2017 The Android Open Source Project
platform/packages/apps/Gallery2 Version: android-o-mr1-iot-release-smart-clock-fsi	Apache-2.0	Copyright (c) 2005-2008; The Android Open Source Project
vsomeip Version: 3.1.20.3	MPL-2.0	Copyright 2011; The Android Open Source Project
capicxx-core-runtime Version: 3.2.0	MPL-2.0	Copyright (C) 2015-2023, by : BMW Car IT GmbH
Avahi Version: 0.6.31	LGPL-2.1-or- later	Copyright (C) 2015-2023, by : BMW Car IT GmbH
zlib Version: 1.2.8	Zlib	Copyright (C) 1991, 1999 Free Software Foundation, Inc.

Component, Version	License(s)	Copyright
boost Version: 1.74.0	BSL-1.0	Copyright (C) 1995-2024 Jean-loup Gailly and Mark Adler
platform/packages/apps/DeskClock Version: android-9.0.0_r6	Apache-2.0	Copyright (c) 2003-2023 by : Beman Dawes, David Abrahams
Teardroid-phprat Version: 95a4b56	MIT	Copyright (c) 2005-2008; The Android Open Source Project
tzinfo-data Version: v1.2013.7	MIT	Copyright (c) 2022 ScRiPt1337
v8 Version: 5.8.283.32	BSD-3- Clause	Copyright (c) 2005-2025 Philip Ross
vsomeip Version: 2.6.1	MPL-2.0	Copyright (c):the v8 Contributors
wifi-framework Version: 001e303	BSD-2- Clause	Copyright (c): the vsomeip Contributors
WirelessCarPlay Version: 89aa668	MIT	Copyright (c) 2021; Domien Schepers Copyright (c) 2002-2019; Jouni Malinen <j@w1.fi> and contributors Copyright (c) 2002-2022; Jouni Malinen <j@w1.fi> and contributors</j@w1.fi></j@w1.fi>
WSL2-Linux-Kernel Version: v4.9.188	GPL-2.0-only WITH Linux- syscall-note	Copyright (c) 2019 45clouds

Component, Version	License(s)	Copyright
platform/external/dbus Version: nougat-iot-release	GPL-2.0-or- later	Copyright (C) 2004, 2007-2010, 2011-2012 Synopsys, Inc
platform/external/devlib Version: android-wear-9.0.0_r13	Apache-2.0	Copyright (C) 2007 Red Hat, Inc.
platform/external/drrickorang Version: android-8.1.0_r3	Apache-2.0	Copyright 2013-2015 ARM Limited
platform/external/e2fsprogs Version: android-wear-9.0.0_r27	GPL-2.0-only	Copyright (C) 2015 The Android Open Source Project
platform/external/easymock Version: android-security-9.0.0_r73	Apache-2.0	Copyright (C) 1989, 1991 Free Software Foundation, Inc.
platform/external/elfutils Version: android-cts-7.0_r6	GPL-2.0-or- later	Copyright 2001-2009 OFFIS, Tammo Freese
platform/external/fat32lib Version: main	LGPL-2.0-or- later	Copyright (C) 1989, 1991 Free Software Foundation, Inc.
platform/external/fdlibm Version: android-o-mr1-iot-release-1.0.1	MIT	Copyright (C) 1991, 1999 Free Software Foundation, Inc.
platform/packages/apps/OneTimeInitializer Version: android-8.0.0_r9	Apache-2.0	Copyright (C) 2007 The Android Open Source Project
platform/packages/apps/QuickSearchBox Version: pie-security-release	Apache-2.0	Copyright (C) 2012 The Android Open Source Project

Component, Version	License(s)	Copyright
platform/packages/apps/SafetyRegulatoryInfo Version: android-8.1.0_r51	Apache-2.0	Copyright (c) 2005-2008; The Android Open Source Project Copyright (C) 2010 The Android Open Source Project Copyright (C) 2009 The Android Open Source Project
platform/packages/apps/SettingsIntelligence Version: android-wear-9.0.0_r11	Apache-2.0	Copyright (c) 2016; The Android Open Source Project
platform/packages/apps/SpareParts Version: oreo-m6-s2-release	Apache-2.0	Copyright (c) 2005-2008; The Android Open Source Project Copyright (C) 2017 The Android Open Source Project
platform/frameworks/opt/datetimepicker Version: android-cts-9.0_r13	Apache-2.0	Copyright (c) 2005-2008; The Android Open Source Project
platform/frameworks/opt/inputmethodcommon Version: android-cts-5.1_r5	Apache-2.0	Copyright (C) 2013 The Android Open Source Project
platform/frameworks/opt/net/ims Version: android-vts-9.0_r14	BSD-3- Clause	Copyright (C) 2011 The Android Open Source Project
platform/frameworks/opt/net/lowpan Version: android-wear-9.0.0_r17	Apache-2.0	Copyright (C) 2016 The Android Open Source Project Copyright 2013 The Android Open Source Project
chanu Version: v2.0.20	GPL-3.0-or- later	Copyright (C) 2018 The Android Open Source Project

Component, Version	License(s)	Copyright
asm Version: 4	BSD-3- Clause	Copyright (c) The chanu Contributors
brotli Version: v1.0.1	MIT	Copyright (c) The guice Contributors
ProcessPhoenix Version: 2.0.0	Apache-2.0	Copyright (c) The brotli Contributors
OpenCV Version: 4.11.0	Apache-2.0	Copyright (c) JakeWharton
AhMyth Version: v1.0-beta.3a	GPL-3.0-only	Copyright © 2025, OpenCV Team
zopfli Version: 0.0.4	MIT	Copyright (C) 2007 Free Software Foundation
wearable Version: 2.2.0	Apache-2.0	Copyright 2011 Google Inc
xwork-core Version: 2.2.1	Apache-2.0	Copyright (c) Oracle Corporation

Component, Version	License(s)	Copyright
cURL Version: 8.7.1	MIT	Copyright (c) 2004-2006; The Dojo Foundation; All Rights Reserved; copyright of the Dojo Foundation. These; Copyright 2006 The Apache Software Foundation.; Copyright (c) 2005 - 2007 Taras Puchko; copyright.html#Exhibit1; Copyright (c) 2005; 2006 Taras Puchko; Copyright (c) the Dojo Foundation; with the; Copyright 2005-2006 The Apache Software Foundation.
Trove4J Version: 1.0.20181211	LGPL-2.1- only	0
twitch4j-kotlin Version: 1.11.0	MIT	Copyright (c) 1999 CERN - European Organization for Nuclear Research.
tz Version: 2014b	Unlicense AND BSD-3- Clause	Copyright (c) 2016-2018 Ohad Shai
cpulimit Version: No Version	GPL-2.0-or- later	Copyright (c): the tz Contributors
os-2-wpa_supplicant Version: Releasev2.7	BSD-3- Clause	Copyright (C) 2005-2012, by: Angelo Marletta <angelo at="" com="" dot="" gmail="" marletta=""></angelo>
parameter-framework Version: v3.2.1	BSD-3- Clause	Copyright (c) 2002-2018; Jouni Malinen <j@w1.fi> and contributors</j@w1.fi>

Component, Version	License(s)	Copyright
platform_bionic Version: android-9.0.0_r18	Apache-2.0	Copyright (c) 2011-2015 Intel Corporation
platform_packages_apps_settings Version: android-vts-9.0_r13	Apache-2.0	Copyright (C) 2008 The Android Open Source Project
platform_packages_apps_stk Version: android-9.0.0_r17	Apache-2.0	Copyright (c) 2005-2008, The Android Open Source Project
platform_system_core Version: android-wear-9.0.0_r9	Apache-2.0	Copyright (c) 2005-2008, The Android Open Source Project
log4j-core Version: 2.25.1	Apache-2.0	Copyright 2005-2008 The Android Open Source Project
org-apache-commons-lang Version: RELEASE100	Apache-1.1	Copyright (c) The log4j-core Contributors
org.eclipse.text Version: 3.5.400	EPL-1.0	Copyright (c) Apache NetBeans Dev Mailing List
org.jacoco.agent Version: 0.7.2.201409121644	EPL-1.0	Copyright (c) The org.eclipse.text Contributors
org.jacoco.ant Version: 0.7.1.201405082137	EPL-1.0	Copyright © 2006, 2020 Eclipse Contributors and others
platform_development Version: android-wear-9.0.0_r2	Apache-2.0	Copyright © 2006, 2020 Eclipse Contributors and others
platform_external_skia Version: android-vts-9.0_r10	BSD-3- Clause	Copyright 2016 The Android Open Source Project

Component, Version	License(s)	Copyright
platform_hardware_libhardware Version: android-vts-9.0_r5	Apache-2.0	Copyright 2017 Google Inc.
platform_packages_apps_htmlviewer Version: android-wear-8.0.0_r1	Apache-2.0	Copyright (c) 2005-2008, The Android Open Source Project
platform_packages_apps_packageinstaller Version: android-wear-9.0.0_r23	Apache-2.0	Copyright (c) 2005-2008, The Android Open Source Project
log4j Version: 1.2.17	Apache-2.0	Copyright (c) 2005-2008, The Android Open Source Project
log4j Version: 1.2.14	Apache-2.0	Copyright (c) The log4j Contributors
log4j Version: 1.2.12	Apache-2.0	Copyright (c) The log4j Contributors
log4j-api Version: 2.25.1	Apache-2.0	Copyright (c) The log4j Contributors
maven-plugin-api Version: 2.0.9	Apache-2.0	Copyright (c) The log4j-api Contributors
netbeans Version: 7.0.1+dfsg1.orig	CDDL-1.0 OR GPL-2.0-with- classpath- exception Selected: CDDL-1.0	Copyright (c) The maven-plugin-api Contributors

Component, Version	License(s)	Copyright
org-apache-commons-io Version: RELEASE90	Apache-2.0	Copyright 2017-2023 The Apache Software Foundation Copyright 2017-2018 The Apache Software Foundation Copyright 2017-2022 The Apache Software Foundation Copyright (c) 1990-2002 Info-ZIP. All rights reserved. Copyright (C) 1989; 1991 Free Software Foundation; Inc. Copyright (c) 1990-2000 Info-ZIP. All rights reserved. (c) the combination of files containing Original Software with files containing Modifications; in each case including portions Copyright 2017-2021 The Apache Software Foundation Copyright (c) 1990-2005 Info-ZIP. All rights reserved.
JUnit Version: 4.12	EPL-1.0	Copyright (c) Apache NetBeans Dev Mailing List
JUnit Version: 4.5	CPL-1.0	Copyright (C), The JUnit Team.
JUnit Version: 4.6	CPL-1.0	Copyright (C), The JUnit Team.

Component, Version	License(s)	Copyright
junit-dep Version: 4.10	CPL-1.0	Copyright (C), The JUnit Team.
junit-dep Version: 4.8.2	CPL-1.0	Copyright (C), The JUnit Team.
junit-dep Version: 4.8.1	CPL-1.0	Copyright (C), The JUnit Team.
languagepack Version: turkish-2.0.0	Apache-2.0	Copyright (C), The JUnit Team.
languagepack Version: 2.0.1	Apache-2.0	Copyright (c) The languagepack Contributors
libexif Version: libexif-0_6_22-release	LGPL-2.1- only	Copyright (c) The languagepack Contributors
libusb Version: v1.0.21-rc5	LGPL-2.1-or- later	Copyright (C) 1991, 1999 Free Software Foundation, Inc.
hibernate Version: 3.2.1.ga	LGPL-2.1-or- later	Copyright (C) 1991, 1999 Free Software Foundation, Inc.
hibernate-annotations Version: 3.2.0.ga	LGPL-2.1-or- later	Copyright 2012-2013 the Hibernate team
jFormatString Version: 2.0.2	LGPL	Copyright 2012-2013 the Hibernate team
jFormatString Version: 3.0.0	LGPL	Copyright (c), Google Inc.

Component, Version	License(s)	Copyright
jsoup Version: 1.7.3	MIT	Copyright (c), Google Inc.
jsoup Version: 1.6.3	MIT	Copyright (c) 2009-2025 Jonathan Hedley
jsr305 Version: 1.3.9	Apache-2.0	Copyright (c) 2009-2025 Jonathan Hedley
jsr305 Version: 2.0.0	Apache-2.0	Copyright (c), Google Inc.
jsr305 Version: 3.0.1	Apache-2.0	Copyright (c), Google Inc.
jsr305 Version: 3.0.0	Apache-2.0	Copyright (c), Google Inc.
jsr311-api Version: 1.1.1	CDDL-1.0	Copyright (c), Google Inc.
JUnit Version: 3.8.1	CPL-1.0	Copyright (c), Google Inc.
JUnit Version: 4.8.1	CPL-1.0	Copyright (C), The JUnit Team.
JUnit Version: 4.11	CPL-1.0	Copyright (C), The JUnit Team.
ftplet-api Version: 1.1.1	Apache-2.0	Copyright (C), The JUnit Team.

Component, Version	License(s)	Copyright
ftpserver-core Version: 1.0.0-M3	Apache-2.0	Copyright (c) The ftplet Contributors
gson Version: 2.2.2	Apache-2.0	Copyright (c) The ftpserver Contributors
jarjar Version: 1.2.1	MIT	Copyright (c), Google Inc.
jarjar Version: 1.3	Apache-2.0	Copyright (C), The jarjar Contributors
jarjar Version: 1.1	Apache-2.0	Copyright (C), The jarjar Contributors
javac Version: 9-dev-r4023-2	GPL-2.0-with- classpath- exception	Copyright (C), The jarjar Contributors
javacutil Version: 1.8.9	GPL-2.0-only	Copyright (c), Google Inc.
javaparser-core Version: 3.0.0-alpha.2	LGPL-2.1-or- later OR Apache-2.0 Selected: Apache-2.0	Copyright 2004-present by the Checker Framework developers
javaparser-core Version: 2.1.0	LGPL-3.0-or- later	Copyright (C) 2011, 2013-2024 The JavaParser Team.

Component, Version	License(s)	Copyright
javassist Version: 3.14.0-GA	MPL-1.1 or LGPL-2.1-or- later Selected: LGPL-2.1-or- later	Copyright (C) 2011, 2013-2024 The JavaParser Team.
jaxb-xjc Version: 2.2.11	GPL-1.1 OR GPL-2.0-with- classpath- exception Selected: GPL-2.0-with- classpath- exception	Copyright (C), The javassist Team.
jformatstring Version: 0.10~20131207.orig	GPL-2.0-only	Copyright (C), The jaxb-xjc Team.
guava Version: 18.0-rc2	Apache-2.0	Copyright (c), Google Inc.
guava Version: 16.0.1	Apache-2.0	Copyright (C) 2007 The Guava Authors
guice Version: 4.0	Apache-2.0	Copyright (C) 2007 The Guava Authors
exfatprogs-debugsource Version: 1.0.3	GPL-2.0-or- later	Copyright (C) 2006 Google Inc.

Component, Version	License(s)	Copyright
hostap-wpa3 Version: 3085f9a	BSD-3- Clause	Copyright 2020 The Android Open Source Project
httpclient Version: 4.2.1	Apache-2.0	Copyright (c) 2002-2022, Jouni Malinen <j@w1.fi> and contributors</j@w1.fi>
httpcore Version: 4.2.1	Apache-2.0	Copyright (C), The httpclient Contributors
iperf Version: 2.0.5-3	BSD-3- Clause	Copyright (C), The httpcore Contributors
iperf-debuginfo Version: 2.0.5-11.el6.i686	BSD-3- Clause	Copyright (c) 1999-2007, The Board of Trustees of the University of Illinois
ivy Version: 2.1.0	Apache-2.0	Copyright (c) 1999-2007, The Board of Trustees of the University of Illinois
findbugs Version: 2.0.1	LGPL-2.1-or- later AND Apache-2.0	Copyright (C), The ivy Contributors
findbugs-ant Version: 2.0.3	LGPL-2.1-or- later	Copyright (c) The findbugs Contributors
flatbuffers-java Version: 1.8.0.1	Apache-2.0	Copyright (c) The findbugs-ant Contributors
flex Version: 2.5.39	BSD-3- Clause	Copyright (c) The flatbuffers-java Contributors

Component, Version	License(s)	Copyright
freemarker Version: 2.3.24-incubating	Apache-2.0	Copyright (c) 2001, 2002, 2003, 2004, 2005, 2006, 2007 The Flex Project. Copyright (c) 1990, 1997 The Regents of the University of California. All rights reserved.
gson Version: 2.2.4	Apache-2.0	Copyright (c) The freemarker Contributors
gson Version: 2.3	Apache-2.0	Copyright (c), Google Inc.
gson Version: 2.6.2	Apache-2.0	Copyright (c), Google Inc.
gson Version: 2.8.0	Apache-2.0	Copyright (c), Google Inc.
gson Version: 2.10.1	Apache-2.0	Copyright (c), Google Inc.
guava Version: 17.0	Apache-2.0	Copyright (c), Google Inc.
error_prone_annotations Version: 2.0.2	Apache-2.0	Copyright (C) 2007 The Guava Authors
error_prone_annotations Version: 2.0.18	Apache-2.0	Copyright (c) The error_prone_annotation Contributors
error_prone_annotations Version: 2.0.12	Apache-2.0	Copyright (c) The error_prone_annotation Contributors

Component, Version	License(s)	Copyright
error_prone_core Version: 2.1.2	Apache-2.0	Copyright (c) The error_prone_annotation Contributors
error_prone_core Version: 2.2.0	Apache-2.0	Copyright (c) The error_prone_core Contributors
error_prone_core Version: 2.0.18	Apache-2.0	Copyright (c) The error_prone_core Contributors
exfatprogs Version: 1.0.4-1	GPL-2.0-or- later	Copyright (c) The error_prone_core Contributors
error_prone_annotation Version: 2.0.18	Apache-2.0	Copyright 2020 The Android Open Source Project
error_prone_annotation Version: 2.2.0	Apache-2.0	Copyright (c) The error_prone_annotation Contributors
error_prone_annotations Version: 2.2.0	Apache-2.0	Copyright (c) The error_prone_annotation Contributors
findbugs Version: 3.0.0	LGPL	Copyright (c) The error_prone_annotation Contributors
findbugs Version: 2.0.3	LGPL	Copyright (c) The findbugs Contributors
posixtestsuite Version: 1.5.2-4	GPL-2.0-or- later	Copyright (c) The findbugs Contributors

Component, Version	License(s)	Copyright
ppp Version: ppp-2.4.7	BSD-2- Clause AND GPL-2.0-or- later AND Unlicense	Copyright (C) 1989, 1991 Free Software Foundation, Inc
proguard Version: proguard5.1	GPL-2.0-only WITH LicenseRef- Lafortune- Linking- Exception	copyright problems copyright restrictions; and it achieves better Copyright 1995-2000 EPFL-LRC ICA; and are licensed under the GNU Lesser (c) The contribution was provided directly to me by some other
e2fsprogs Version: v1.43.4	BSD-3- Clause	Copyright (c) 2002-2014 Eric Lafortune (eric@graphics.cornell.edu)
easymock Version: 2.2	MIT	Copyright (c) The e2fsprogs Contributors
easymock Version: 2.4	MIT	Copyright (c) The easymock Contributors
error_prone_annotation Version: 2.1.0	Apache-2.0	Copyright (c) The easymock Contributors
cobertura Version: 1.7	GPL-2.0-or- later	Copyright (c) 2009-2014 Braintree
commons-codec Version: 1.1	Apache-2.0	Copyright (C) 2000 Chr. Clemens Lee

Component, Version	License(s)	Copyright
error_prone_annotations Version: 2.1.2	Apache-2.0	Copyright (c) The commons-codec Contributors
error_prone_annotations Version: 2.1.3	Apache-2.0	Copyright (c) The error_prone_annotation Contributors
slf4j-api Version: 1.7.12	MIT	Copyright (c) The error_prone_annotation Contributors
slf4j-log4j12 Version: 1.7.21	MIT	Copyright (c) 2004-2022 QOS.ch Sarl (Switzerland)
commons-logging Version: 1.0.4	Apache-2.0	Copyright (c) 2004-2022 QOS.ch Sarl (Switzerland)
commons-logging Version: 1.1.1	Apache-2.0	Copyright (c) The commons-logging Contributors
commons-logging Version: 1.1.3	Apache-2.0	Copyright (c) The commons-logging Contributors
dashclock Version: v1.5	Apache-2.0	Copyright (c) The commons-logging Contributors
dataflow Version: 2.1.14	GPL-2.0-with- classpath- exception	Copyright (c) The dashclock Contributors
dataflow Version: 2.2.2	GPL-2.0-with- classpath- exception	Copyright 2004-present by the Checker Framework developers

Component, Version	License(s)	Copyright
dataflow Version: 1.8.10	GPL-2.0-with- classpath- exception	Copyright 2004-present by the Checker Framework developers
dbench-debugsource Version: 3.04	GPL-3.0-or- later	Copyright 2004-present by the Checker Framework developers
closure-compiler Version: v20160822	Apache-2.0	Copyright (c) The dbench-debugsource Contributors
cglib-nodep Version: 2.2.0	Apache-2.0	Copyright (c) The closure-compiler Contributors
cglib-nodep Version: 3.1	Apache-2.0	Copyright (c) The cglib nodep Contributors
cglib-nodep Version: 3	Apache-2.0	Copyright (c) The cglib nodep Contributors
commons-collections Version: 3.2.1	Apache-2.0	Copyright (c) The cglib nodep Contributors
servlet-api-2.5 Version: 2.0	CDDL AND GPL-2.0	Copyright (c) The commons-collections Contributors
slf4j-nop Version: 1.5.6	MIT	Copyright (C) Oleg S. Lekshin
slf4j-simple Version: 1.5.11	MIT	Copyright (c) 2004-2022 QOS.ch Sarl (Switzerland)

Component, Version	License(s)	Copyright
spew Version: 1.0.5-2	ISC	Copyright (c) 2004-2022 QOS.ch Sarl (Switzerland)
byte-buddy Version: 1.6.5	Apache-2.0	Copyright (c) 2013-2016 Dave Collins <dave@davec.name></dave@davec.name>
byte-buddy-agent Version: 1.11.19	Apache-2.0	Copyright (c) 2025 © Rafael Winterhalter, Oslo, Norway
byte-unixbench Version: v5.1.3	GPL-2.0-only	Copyright (c) 2025 Rafael Winterhalter
cere Version: v0.0.1	GPL-3.0-or- later	Copyright (c) The byte-unixbench Contributors
cglib Version: 2.2.0	Apache-2.0	Copyright (c) The cere Contributors
cglib-nodep Version: 2.1.3	Apache-2.0	Copyright (c) The cglib Contributors
assertj-core Version: 1.7.1	Apache-2.0	Copyright (c) The cglib nodep Contributors
assertj-core Version: 2.0.0	Apache-2.0	Copyright (c) The assertj core Contributors
assertj-core Version: 3.8.0	Apache-2.0	Copyright (c) The assertj core Contributors
auto-service Version: 1.0-rc2	Apache-2.0	Copyright (c) The assertj core Contributors

Component, Version	License(s)	Copyright
bart-py Version: 1.6.0	Apache-2.0	Copyright Google, Inc., 2013
bcel Version: 2.0.0	Apache-2.0	Copyright (c) The bart-py Contributors
bnd Version: 1.50.0	Apache-2.0	Copyright 2004-2025 The Apache Software Foundation
bsdiff Version: 4.3	BSD-2- Clause	Copyright (c) The bnd Contributors
android_external_libusb-compat Version: 0.1.12	LGPL-2.0-or- later AND BSD-3- Clause	Copyright 2012 Matthew Endsley
AndroidPdfViewer Version: 3.1.0-beta.1	Apache-2.0	Copyright (c) 2000-2003 Johannes Erdfelt <johannes@erdfelt.com></johannes@erdfelt.com>
tcpdump Version: tcpdump-4.8.0	BSD-3- Clause	Copyright 2017 Bartosz Schiller
jsoncpp Version: 1.9.3	MIT OR Unlicense Selected: MIT	Copyright (C), The tcpdump Contributors.
FNET Version: 4.6.4	Apache-2.0	0
Mbed TLS Version: 3.6.4	Apache-2.0	Copyright (c) 2008-2018 by Andrey Butok. FNET Community

Component, Version	License(s)	Copyright
stress Version: 1.0.4	GPL-2.0-or- later	0
struts2-core Version: 2.2.1	Apache-2.0	Copyright (C) 1989; 1991 Free Software Foundation; Inc.;
OpenV2G Version: 0.9.4	LGPL-3.0-or- later	Copyright 2000-2021 Apache Software Foundation Copyright 2000-2023 Apache Software Foundation Copyright 2000-2022 Apache Software Foundation
ecc Version: 5.16.7	GPL-2.0-only WITH Linux- syscall-note	Copyright (C) 2007-2018 Siemens AG
vtd-xml Version: 2.11	GPL-2.0-only	Copyright (c) 2013, 2014 Kenneth MacKay. All rights reserved. Copyright (c) 2019 Vitaly Chikunov <vt@altlinux.org></vt@altlinux.org>
wpa Version: 2.3.orig	BSD-3- Clause	Copyright (c) Apache Maven
xalan Version: 2.7.1	Apache-2.0	Copyright (c) 2002-2014; Jouni Malinen <j@w1.fi> and contributors Copyright (c) 2002-2012; Jouni Malinen <j@w1.fi> and contributors</j@w1.fi></j@w1.fi>

Component, Version	License(s)	Copyright
xpp3 Version: 1.1.4c	Apache-1.1 AND CC0-1.0 AND LicenseRef- Indiana- Extreme!Lab- 1.1.1	copyright (c) 1999-2002, Lotus Development Corporation copyright (c) 2001-2002, Sun Microsystems copyright (c) 2003, IBM Corporation
log4j Version: 1.2.9	Apache-1.1	Copyright (c) 2007, Extreme! Lab, Indiana University
migration Version: 1.0.0	Apache-2.0	Copyright (c) The log4j Contributors
migration Version: 1.1.0-beta3	Apache-2.0	Copyright (c) The migration Contributors
migration Version: 1.0.0-rc1	Apache-2.0	Copyright (c) The migration Contributors
ognl Version: 3	Apache-2.0	Copyright (c) The migration Contributors
libcore-dex Version: 7.1.0_r7	Apache-2.0	Copyright (c) 2001-2004 The OpenSymphony Group. All rights reserved.
libcore-dex Version: 2	Apache-2.0	Copyright (c) The libcore-dex Contributors

Component, Version	License(s)	Copyright
linux-pam Version: Linux-PAM-1.3.0	BSD-3- Clause OR GPL-2.0-or- later Selected: BSD-3- Clause	Copyright (c) The libcore-dex Contributors
localbroadcastmanager Version: 1.0.0-alpha1	Apache-2.0	Copyright (c) The linux-pam Contributors
javac2 Version: 6.0.5	Apache-2.0	Copyright (C) 2014 The Android Open Source Project
javacc Version: 5.0	BSD-2- Clause	Copyright (C) JetBrains s.r.o.
javancss Version: 21.41	GPL or LGPL Selected: LGPL	Copyright (c) 2006, Sun Microsystems, Inc.
jaxen Version: 1.1.1	BSD-3- Clause	Copyright: Chr. Clemens Lee

Component, Version	License(s)	Copyright
jersey-client Version: 1.11	GPL-2.0-with- classpath- exception OR CDDL-1.1 Selected: GPL-2.0-with- classpath- exception	Copyright 2003-2006 The Werken Company
jersey-core Version: 1.11	GPL-2.0-with- classpath- exception OR CDDL-1.1 Selected: GPL-2.0-with- classpath- exception	Copyright (C), The jersey Team.
hsqldb Version: 1.8.0.1	BSD-3- Clause	Copyright (C), The jersey Team.
isoparser Version: 1.0-beta-4	MIT	Copyright (C), The hsqldb Contributors
gant Version: 1.4.0	Apache-2.0	Copyright (c), Google Inc.
gflags Version: v2.2.0	BSD-3- Clause	Copyright (c) Sun Microsystems Inc.

Component, Version	License(s)	Copyright
external_safe-iop Version: b634186	ISC	Copyright (c) 2006, Google Inc.
doclava Version: 1.0.3	MIT	Copyright (C) 2008 The Android Open Source Project
docvert Version: 4.0.orig	GPL-3.0-or- later	Copyright 2017 The Android Open Source Project
dom4j-1.6.1 Version: 1.6.1	BSD-3- Clause	Copyright (C) 2007 Free Software Foundation, Inc.
dbus Version: dbus-1.10.14	AFL-2.1 OR GPL-2.0-or- later Selected: AFL-2.1	Copyright (c) The dom4j Contributors
core Version: 0.2.3	BSD-3- Clause	Copyright (c) The dbus Contributors
core Version: 3.1.1	Apache-2.0	Copyright (c) The core Contributors
core Version: 2.3.6	Apache-2.0	Copyright (c) The core Contributors
dalvik-dx Version: 7.1.0_r7	Apache-2.0	Copyright (c) The core Contributors
dalvik-dx Version: 1	Apache-2.0	Copyright (c) The dalvik-dx Contributors

Component, Version	License(s)	Copyright
dbus Version: 1.10.14	AFL-2.1 OR GPL-2.0-or- later Selected: AFL-2.1	Copyright (c) The dalvik-dx Contributors
cobertura Version: 1.9rc1	GPL-2.0-or- later	Copyright (c) The dbus Contributors
common Version: 23.2.5	Apache-2.0	Copyright (C) 2000 Chr. Clemens Lee
release.dxp.api Version: 7.1.10.fp12	BSD-3- Clause	Copyright (c) The common Contributors

Component, Version	License(s)	Copyright
room-common Version: 2.0.0	Apache-2.0	Copyright 1999-2018 The Apache Software Foundation. Copyright (c) 2000-2006; www.hamcrest.org. Copyright 2003-2020 The Apache Software Foundation (c) the combination of files containing Original (c) the combination of files containing Original Software with files containing Modifications; in each case including portions Copyright (c) 2000-2006; www.hamcrest.org Copyright 1999-2022 The Apache Software Foundation Copyright (c) 2005-2013; salesforce.com; inc. All rights reserved. Copyright 1999-2020 The Apache Software Foundation. Copyright 1999-2018 The Apache Software Foundation
room-compiler Version: 2.0.0-beta01	Apache-2.0	Copyright (C) 2016 The Android Open Source Project
runtime Version: 1.0.0	Apache-2.0	Copyright (C) 2016 The Android Open Source Project
scapy Version: 2.4.0rc4	GPL-2.0-only	Copyright (C) 2016 The Android Open Source Project

Component, Version	License(s)	Copyright
ccl Version: 21.41	GPL-3.0-only	Copyright (C) 1989; 1991 Free Software Foundation; Inc.;
chromium-browser Version: 61.0.3163.100-2	BSD-3- Clause	Copyright Chr. Clemens Lee
ant-antlr3 Version: 20110110	Apache-2.0 or BSD-3- Clause Selected: BSD-3- Clause	Copyright (c) 2006-2009 The Chromium OS Authors. All rights reserved. Copyright 2015 The Chromium Authors. All rights reserved.
ant-contrib Version: 1.0b2	Apache-2.0	Copyright (c) 2001-2003 Ant-Contrib project
antlr Version: 3.5.2	BSD-3- Clause	Copyright © 2002-2003 Ant-Contrib Project
apache-xml Version: android-wear-5.0.0_r1	Apache-2.0	Copyright ANTLR / Terence Parr
asm-commons Version: 4	BSD-3- Clause	Copyright 1999-2006 The Apache Software Foundation
bnd Version: 0.0.384	Apache-2.0	Copyright (c) The asm commons Contributors
support-compat Version: 27.0.2	Apache-2.0	Copyright (c) The bnd Contributors

Component, Version	License(s)	Copyright
syslinux Version: 6.03	GPL-2.0-or- later	Copyright (C) The Android Open Source Project
tagsoup Version: 1.2	Apache-2.0	Copyright 1994-2011 H. Peter Anvin et al - All Rights Reserved
tcpdump-debugsource Version: 4.9.2	BSD-3- Clause	Copyright (c) Sun Microsystems Inc
third_party_f2fs-tools Version: git.kernel.org/v1.14.0	GPL-2.0-only	Copyright (C), The tcpdump Contributors.
third_party_ntfs-3g Version: github.com/2017.3.23AR.4	GPL-2.0-or- later	Copyright (c) 2012 Samsung Electronics Co., Ltd.
third_party_wpa_supplicant Version: OpenHarmony-v3.2-Beta5	BSD-3- Clause	Copyright (C) 1989, 1991 Free Software Foundation, Inc.

OpenSSL License

Identifier: OpenSSL

OpenSSL License

Copyright (c) 1998-2008 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 opensslore. 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, 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 rouines 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 v2.0 only

Identifier: GPL-2.0-only

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.

TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

O. 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 an idea of what it does.>
Copyright (C) < yyyy> <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.

MIT License

Identifier: MIT

MIT License

Copyright (c) <year> <copyright holders>

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 (including the next paragraph) 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.

GNU Lesser General Public License v2.1 or later

Identifier: LGPL-2.1-or-later

GNU LESSER GENERAL PUBLIC LICENSE

Version 2.1, February 1999

Copyright (C) 1991, 1999 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.

[This is the first released version of the Lesser GPL. It also counts as the successor of the GNU Library Public License, version 2, hence the version number 2.1.]

Preamble

The licenses for most software are designed to take away your freedom to share and change it. By contrast, the GNU General Public Licenses are intended to guarantee your freedom to share and change free software--to make sure the software is free for all its users.

This license, the Lesser General Public License, applies to some specially designated software packages--typically libraries--of the Free Software Foundation and other authors who decide to use it. You can use it too, but we suggest you first think carefully about whether this license or the ordinary General Public License is the better strategy to use in any particular case, based on the explanations below.

When we speak of free software, we are referring to freedom of use, 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 and use pieces of it in new free programs; and that you are informed that you can do these things.

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

For example, if you distribute copies of the library, whether gratis or for a fee, you must give the recipients all the rights that we gave you. You must make sure that they, too, receive or can get the source code. If you link other code with the library, you must provide complete object files to the recipients, so that they can relink them with the library after making changes to the library and recompiling it. And you must show them these terms so they know their rights.

We protect your rights with a two-step method: (1) we copyright the library, and (2) we offer you this license, which gives you legal permission to copy, distribute and/or modify the library.

To protect each distributor, we want to make it very clear that there is no warranty for the free library. Also, if the library is modified by someone else and passed on, the recipients should know that what they have is not the original version, so that the original author's reputation will not be affected by problems that might be introduced by others.

Finally, software patents pose a constant threat to the existence of any free program. We wish to make sure that a company cannot effectively restrict the users of a free program by obtaining a restrictive license from a patent holder. Therefore, we insist that any patent license obtained for a version of the library must be consistent with the full freedom of use specified in this license.

Most GNU software, including some libraries, is covered by the ordinary GNU General Public License. This license, the GNU Lesser General Public License, applies to certain designated libraries, and is quite different from the ordinary General Public License. We use this license for certain libraries in order to permit linking those libraries into non-free programs.

When a program is linked with a library, whether statically or using a shared library, the combination of the two is legally speaking a combined work, a derivative of the original library. The ordinary General Public License therefore permits such linking only if the entire combination fits its criteria of freedom. The Lesser General Public License permits more lax criteria for linking other code with the library.

We call this license the "Lesser" General Public License because it does Less to protect the user's freedom than the ordinary General Public License. It also provides other free software developers Less of an advantage over competing non-free programs. These disadvantages are the reason we use the ordinary General Public License for many libraries. However, the Lesser license provides advantages in certain special circumstances.

For example, on rare occasions, there may be a special need to encourage the widest possible use of a certain library, so that it becomes a de-facto standard. To achieve this, non-free programs must be allowed to use the library. A more frequent case is that a free library does the same job as widely used non-free libraries. In this case, there is little to gain by limiting the free library to free software only, so we use the Lesser General Public License.

In other cases, permission to use a particular library in non-free programs enables a greater number of people to use a large body of free software. For example, permission to use the GNU C Library in non-free programs enables many more people to use the whole GNU operating system, as well as its variant, the GNU/Linux operating system.

Although the Lesser General Public License is Less protective of the users' freedom, it does ensure that the user of a program that is linked with the Library has the freedom and the wherewithal to run that program using a modified version of the Library.

The precise terms and conditions for copying, distribution and modification follow. Pay close attention to the difference between a "work based on the library" and a "work that uses the library". The former contains code derived from the library, whereas the latter must be combined with the library in order to run.

GNU LESSER GENERAL PUBLIC LICENSE

TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

0. This License Agreement applies to any software library or other program which contains a notice placed by the copyright holder or other authorized party saying it may be distributed under the terms of this Lesser General Public License (also called "this License"). Each licensee is addressed as "you".

A "library" means a collection of software functions and/or data prepared so as to be conveniently linked with application programs (which use some of those functions and data) to form executables.

The "Library", below, refers to any such software library or work which has been distributed under these terms. A "work based on the Library" means either the Library or any derivative work under copyright law: that is to say, a work containing the Library or a portion of it, either verbatim or with modifications and/or translated straightforwardly into another language. (Hereinafter, translation is included without limitation in the term "modification".)

"Source code" for a work means the preferred form of the work for making modifications to it. For a library, 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 library.

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running a program using the Library is not restricted, and output from such a program is covered only if its contents constitute a work based on the Library (independent of the use of the Library in a tool for writing it). Whether that is true depends on what the Library does and what the program that uses the Library does.

1. You may copy and distribute verbatim copies of the Library's complete 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 distribute a copy of this License along with the Library.

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 Library or any portion of it, thus forming a work based on the Library, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:
 - a) The modified work must itself be a software library.
 - b) You must cause the files modified to carry prominent notices stating that you changed the files and the date of any change.
 - c) You must cause the whole of the work to be licensed at no charge to all third parties under the terms of this License.
 - d) If a facility in the modified Library refers to a function or a table of data to be supplied by an application program that uses the facility, other than as an argument passed when the facility is invoked, then you must make a good faith effort to ensure that, in the event an application does not supply such function or table, the facility still operates, and performs whatever part of its purpose remains meaningful.

(For example, a function in a library to compute square roots has a purpose that is entirely well-defined independent of the application. Therefore, Subsection 2d requires that any application-supplied function or table used by this function must be optional: if the application does not supply it, the square root function must still compute square roots.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Library, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Library, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

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 Library.

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

3. You may opt to apply the terms of the ordinary GNU General Public License instead of this License to a given copy of the Library. To do this, you must alter all the notices that refer to this License, so that they refer to the ordinary GNU General Public License, version 2, instead of to this License. (If a newer version than version 2 of the ordinary GNU General Public License has appeared, then you can specify that version instead if you wish.) Do not make any other change in these notices.

Once this change is made in a given copy, it is irreversible for that copy, so the ordinary GNU General Public License applies to all subsequent copies and derivative works made from that copy.

This option is useful when you wish to copy part of the code of the Library into a program that is not a library.

4. You may copy and distribute the Library (or a portion or derivative of it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you 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.

If distribution of 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 satisfies the requirement to distribute the source code, even though third parties are not compelled to copy the source along with the object code.

5. A program that contains no derivative of any portion of the Library, but is designed to work with the Library by being compiled or linked with it, is called a "work that uses the Library". Such a work, in isolation, is not a derivative work of the Library, and therefore falls outside the scope of this License.

However, linking a "work that uses the Library" with the Library creates an executable that is a derivative of the Library (because it contains portions of the Library), rather than a "work that uses the library". The executable is therefore covered by this License. Section 6 states terms for distribution of such executables.

When a "work that uses the Library" uses material from a header file that is part of the Library, the object code for the work may be a derivative work of the Library even though the source code is not. Whether this is true is especially significant if the work can be linked without the Library, or if the work is itself a library. The threshold for this to be true is not precisely defined by law.

If such an object file uses only numerical parameters, data structure layouts and accessors, and small macros and small inline functions (ten lines or less in length), then the use of the object file is unrestricted, regardless of whether it is legally a derivative work. (Executables containing this object code plus portions of the Library will still fall under Section 6.)

Otherwise, if the work is a derivative of the Library, you may distribute the object code for the work under the terms of Section 6. Any executables containing that work also fall under Section 6, whether or not they are linked directly with the Library itself.

6. As an exception to the Sections above, you may also combine or link a "work that uses the Library" with the Library to produce a work containing portions of the Library, and distribute that work under terms of your choice, provided that the terms permit modification of the work for the customer's own use and reverse engineering for debugging such modifications.

You must give prominent notice with each copy of the work that the Library is used in it and that the Library and its use are covered by this License. You must supply a copy of this License. If the work during execution displays copyright notices, you must include the copyright notice for the Library among them, as well as a reference directing the user to the copy of this License. Also, you must do one of these things:

- a) Accompany the work with the complete corresponding machine-readable source code for the Library including whatever changes were used in the work (which must be distributed under Sections 1 and 2 above); and, if the work is an executable linked with the Library, with the complete machine-readable "work that uses the Library", as object code and/or source code, so that the user can modify the Library and then relink to produce a modified executable containing the modified Library. (It is understood that the user who changes the contents of definitions files in the Library will not necessarily be able to recompile the application to use the modified definitions.)
- b) Use a suitable shared library mechanism for linking with the Library. A suitable mechanism is one that (1) uses at run time a copy of the library already present on the user's computer system, rather than copying library functions into the executable, and (2) will operate properly with a modified version of the library, if

the user installs one, as long as the modified version is interface-compatible with the version that the work was made with.

- c) Accompany the work with a written offer, valid for at least three years, to give the same user the materials specified in Subsection 6a, above, for a charge no more than the cost of performing this distribution.
- d) If distribution of the work is made by offering access to copy from a designated place, offer equivalent access to copy the above specified materials from the same place.
- e) Verify that the user has already received a copy of these materials or that you have already sent this user a copy.

For an executable, the required form of the "work that uses the Library" must include any data and utility programs needed for reproducing the executable from it. However, as a special exception, the materials to be distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

It may happen that this requirement contradicts the license restrictions of other proprietary libraries that do not normally accompany the operating system. Such a contradiction means you cannot use both them and the Library together in an executable that you distribute.

- 7. You may place library facilities that are a work based on the Library side-by-side in a single library together with other library facilities not covered by this License, and distribute such a combined library, provided that the separate distribution of the work based on the Library and of the other library facilities is otherwise permitted, and provided that you do these two things:
 - a) Accompany the combined library with a copy of the same work based on the Library, uncombined with any other library facilities. This must be distributed under the terms of the Sections above.
 - b) Give prominent notice with the combined library of the fact that part of it is a work based on the Library, and explaining where to find the accompanying uncombined form of the same work.
- 8. You may not copy, modify, sublicense, link with, or distribute the Library except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense, link with, or distribute the Library 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.
- 9. 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 Library or its derivative works. These actions are prohibited by law if you do

not accept this License. Therefore, by modifying or distributing the Library (or any work based on the Library), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Library or works based on it.

- 10. Each time you redistribute the Library (or any work based on the Library), the recipient automatically receives a license from the original licensor to copy, distribute, link with or modify the Library 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 with this License.
- 11. 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 Library at all. For example, if a patent license would not permit royalty-free redistribution of the Library 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 Library.

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.

- 12. If the distribution and/or use of the Library is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Library 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.
- 13. The Free Software Foundation may publish revised and/or new versions of the Lesser 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 Library 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 Library does not specify a license version number, you may choose any version ever published by the Free Software Foundation.

14. If you wish to incorporate parts of the Library into other free programs whose distribution conditions are incompatible with these, 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

15. BECAUSE THE LIBRARY IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE LIBRARY, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE LIBRARY "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 LIBRARY IS WITH YOU. SHOULD THE LIBRARY PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

16. 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 LIBRARY 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 LIBRARY (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 LIBRARY TO OPERATE WITH ANY OTHER SOFTWARE), 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 Libraries

If you develop a new library, and you want it to be of the greatest possible use to the public, we recommend making it free software that everyone can redistribute and change. You can do so by permitting redistribution under these terms (or, alternatively, under the terms of the ordinary General Public License).

To apply these terms, attach the following notices to the library. 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 library's name and an idea of what it does.>
Copyright (C) <year> <name of author>

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.

This library 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 Lesser General Public License for more details.

You should have received a copy of the GNU Lesser General Public License along with this library; 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.

You should also get your employer (if you work as a programmer) or your school, if any, to sign a "copyright disclaimer" for the library, if necessary. Here is a sample; alter the names:

Yoyodyne, Inc., hereby disclaims all copyright interest in the library `Frob' (a library for tweaking knobs) written by James Random Hacker.

<signature of Ty Coon >, 1 April 1990 Ty Coon, President of Vice That's all there is to it!

GNU General Public License v3.0 or later

Identifier: GPL-3.0-or-later

GNU GENERAL PUBLIC LICENSE Version 3, 29 June 2007

Copyright © 2007 Free Software Foundation, Inc. https://fsf.org/

Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed.

Preamble

The GNU General Public License is a free, copyleft license for software and other kinds of works.

The licenses for most software and other practical works are designed to take away your freedom to share and change the works. By contrast, the GNU General Public License is intended to guarantee your freedom to share and change all versions of a program--to make sure it remains free software for all its users. We, the Free Software Foundation, use the GNU General Public License for most of our software; it applies also to any other work released this way by its authors. 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 them 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 prevent others from denying you these rights or asking you to surrender the rights. Therefore, you have certain responsibilities if you distribute copies of the software, or if you modify it: responsibilities to respect the freedom of others.

For example, if you distribute copies of such a program, whether gratis or for a fee, you must pass on to the recipients the same freedoms that you received. 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.

Developers that use the GNU GPL protect your rights with two steps: (1) assert copyright on the software, and (2) offer you this License giving you legal permission to copy, distribute and/or modify it.

For the developers' and authors' protection, the GPL clearly explains that there is no warranty for this free software. For both users' and authors' sake, the GPL requires that modified versions be marked as changed, so that their problems will not be attributed erroneously to authors of previous versions.

Some devices are designed to deny users access to install or run modified versions of the software inside them, although the manufacturer can do so. This is fundamentally incompatible with the aim of protecting users' freedom to change the software. The systematic pattern of such abuse occurs in the area of products for individuals to use, which is precisely where it is most unacceptable. Therefore, we have designed this version of the GPL to prohibit the practice for those products. If such problems arise substantially in other domains, we stand ready to extend this provision to those domains in future versions of the GPL, as needed to protect the freedom of users.

Finally, every program is threatened constantly by software patents. States should not allow patents to restrict development and use of software on general-purpose computers, but in those that do, we wish to avoid the special danger that patents applied to a free program could make it effectively proprietary. To prevent this, the GPL assures that patents cannot be used to render the program non-free.

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

TERMS AND CONDITIONS

0. Definitions.

"This License" refers to version 3 of the GNU General Public License.

"Copyright" also means copyright-like laws that apply to other kinds of works, such as semiconductor masks.

"The Program" refers to any copyrightable work licensed under this License. Each licensee is addressed as "you". "Licensees" and "recipients" may be individuals or organizations.

To "modify" a work means to copy from or adapt all or part of the work in a fashion requiring copyright permission, other than the making of an exact copy. The resulting work is called a "modified version" of the earlier work or a work "based on" the earlier work.

A "covered work" means either the unmodified Program or a work based on the Program.

To "propagate" a work means to do anything with it that, without permission, would make you directly or secondarily liable for infringement under applicable copyright law, except executing it on a computer or modifying a private copy. Propagation includes copying, distribution (with or without modification), making available to the public, and in some countries other activities as well.

To "convey" a work means any kind of propagation that enables other parties to make or receive copies. Mere interaction with a user through a computer network, with no transfer of a copy, is not conveying.

An interactive user interface displays "Appropriate Legal Notices" to the extent that it includes a convenient and prominently visible feature that (1) displays an appropriate copyright notice, and (2) tells the user that there is no warranty for the work (except to the extent that warranties are provided), that licensees may convey the work under this License, and how to view a copy of this License. If the interface presents a list of user commands or options, such as a menu, a prominent item in the list meets this criterion.

1. Source Code.

The "source code" for a work means the preferred form of the work for making modifications to it. "Object code" means any non-source form of a work.

A "Standard Interface" means an interface that either is an official standard defined by a recognized standards body, or, in the case of interfaces specified for a particular programming language, one that is widely used among developers working in that language.

The "System Libraries" of an executable work include anything, other than the work as a whole, that (a) is included in the normal form of packaging a Major Component, but which is not part of that Major Component, and (b) serves only to enable use of the work with that Major Component, or to implement a Standard Interface for which an implementation is available to the public in source code form. A "Major Component", in this context, means a major essential component (kernel, window system, and so on) of the specific operating system (if any) on which the executable work runs, or a compiler used to produce the work, or an object code interpreter used to run it.

The "Corresponding Source" for a work in object code form means all the source code needed to generate, install, and (for an executable work) run the object code and to modify the work, including scripts to control those activities. However, it does not include the work's System Libraries, or general-purpose tools or generally

available free programs which are used unmodified in performing those activities but which are not part of the work. For example, Corresponding Source includes interface definition files associated with source files for the work, and the source code for shared libraries and dynamically linked subprograms that the work is specifically designed to require, such as by intimate data communication or control flow between those subprograms and other parts of the work.

The Corresponding Source need not include anything that users can regenerate automatically from other parts of the Corresponding Source.

The Corresponding Source for a work in source code form is that same work.

2. Basic Permissions.

All rights granted under this License are granted for the term of copyright on the Program, and are irrevocable provided the stated conditions are met. This License explicitly affirms your unlimited permission to run the unmodified Program. The output from running a covered work is covered by this License only if the output, given its content, constitutes a covered work. This License acknowledges your rights of fair use or other equivalent, as provided by copyright law.

You may make, run and propagate covered works that you do not convey, without conditions so long as your license otherwise remains in force. You may convey covered works to others for the sole purpose of having them make modifications exclusively for you, or provide you with facilities for running those works, provided that you comply with the terms of this License in conveying all material for which you do not control copyright. Those thus making or running the covered works for you must do so exclusively on your behalf, under your direction and control, on terms that prohibit them from making any copies of your copyrighted material outside their relationship with you.

Conveying under any other circumstances is permitted solely under the conditions stated below. Sublicensing is not allowed; section 10 makes it unnecessary.

3. Protecting Users' Legal Rights From Anti-Circumvention Law.

No covered work shall be deemed part of an effective technological measure.

No covered work shall be deemed part of an effective technological measure under any applicable law fulfilling obligations under article 11 of the WIPO copyright treaty adopted on 20 December 1996, or similar laws prohibiting or restricting circumvention of such measures.

When you convey a covered work, you waive any legal power to forbid circumvention of technological measures to the extent such circumvention is effected by exercising rights under this License with respect to the covered work, and you disclaim any intention to limit operation or modification of the work as a means of enforcing, against the work's users, your or third parties' legal rights to forbid circumvention of technological measures.

4. Conveying Verbatim Copies.

You may convey 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; keep intact all notices stating that this License and any non-permissive terms added in accord with section 7 apply to the code; keep intact all notices of the absence of any warranty; and give all recipients a copy of this License along with the Program.

You may charge any price or no price for each copy that you convey, and you may offer support or warranty protection for a fee.

5. Conveying Modified Source Versions.

You may convey a work based on the Program, or the modifications to produce it from the Program, in the form of source code under the terms of section 4, provided that you also meet all of these conditions:

- a) The work must carry prominent notices stating that you modified it, and giving a relevant date.
- b) The work must carry prominent notices stating that it is released under this License and any conditions added under section 7. This requirement modifies the requirement in section 4 to "keep intact all notices".
- c) You must license the entire work, as a whole, under this License to anyone who comes into possession of a copy. This License will therefore apply, along with any applicable section 7 additional terms, to the whole of the work, and all its parts, regardless of how they are packaged. This License gives no permission to license the work in any other way, but it does not invalidate such permission if you have separately received it.
- d) If the work has interactive user interfaces, each must display Appropriate Legal Notices; however, if the Program has interactive interfaces that do not display Appropriate Legal Notices, your work need not make them do so.

A compilation of a covered work with other separate and independent works, which are not by their nature extensions of the covered work, and which are not combined with it such as to form a larger program, in or on a volume of a storage or distribution medium, is called an "aggregate" if the compilation and its resulting copyright are not used to limit the access or legal rights of the compilation's users beyond what the individual works

permit. Inclusion of a covered work in an aggregate does not cause this License to apply to the other parts of the aggregate.

6. Conveying Non-Source Forms.

You may convey a covered work in object code form under the terms of sections 4 and 5, provided that you also convey the machine-readable Corresponding Source under the terms of this License, in one of these ways:

- a) Convey the object code in, or embodied in, a physical product (including a physical distribution medium), accompanied by the Corresponding Source fixed on a durable physical medium customarily used for software interchange.
- b) Convey the object code in, or embodied in, a physical product (including a physical distribution medium), accompanied by a written offer, valid for at least three years and valid for as long as you offer spare parts or customer support for that product model, to give anyone who possesses the object code either (1) a copy of the Corresponding Source for all the software in the product that is covered by this License, on a durable physical medium customarily used for software interchange, for a price no more than your reasonable cost of physically performing this conveying of source, or (2) access to copy the Corresponding Source from a network server at no charge.
- c) Convey individual copies of the object code with a copy of the written offer to provide the Corresponding Source. This alternative is allowed only occasionally and noncommercially, and only if you received the object code with such an offer, in accord with subsection 6b.
- d) Convey the object code by offering access from a designated place (gratis or for a charge), and offer equivalent access to the Corresponding Source in the same way through the same place at no further charge. You need not require recipients to copy the Corresponding Source along with the object code. If the place to copy the object code is a network server, the Corresponding Source may be on a different server (operated by you or a third party) that supports equivalent copying facilities, provided you maintain clear directions next to the object code saying where to find the Corresponding Source. Regardless of what server hosts the Corresponding Source, you remain obligated to ensure that it is available for as long as needed to satisfy these requirements.
- e) Convey the object code using peer-to-peer transmission, provided you inform other peers where the object code and Corresponding Source of the work are being offered to the general public at no charge under subsection 6d.

A separable portion of the object code, whose source code is excluded from the Corresponding Source as a System Library, need not be included in conveying the object code work.

A "User Product" is either (1) a "consumer product", which means any tangible personal property which is normally used for personal, family, or household purposes, or (2) anything designed or sold for incorporation into a dwelling. In determining whether a product is a consumer product, doubtful cases shall be resolved in favor of coverage. For a particular product received by a particular user, "normally used" refers to a typical or common use of that class of product, regardless of the status of the particular user or of the way in which the particular user actually uses, or expects or is expected to use, the product. A product is a consumer product regardless of whether the product has substantial commercial, industrial or non-consumer uses, unless such uses represent the only significant mode of use of the product.

"Installation Information" for a User Product means any methods, procedures, authorization keys, or other information required to install and execute modified versions of a covered work in that User Product from a modified version of its Corresponding Source. The information must suffice to ensure that the continued functioning of the modified object code is in no case prevented or interfered with solely because modification has been made.

If you convey an object code work under this section in, or with, or specifically for use in, a User Product, and the conveying occurs as part of a transaction in which the right of possession and use of the User Product is transferred to the recipient in perpetuity or for a fixed term (regardless of how the transaction is characterized), the Corresponding Source conveyed under this section must be accompanied by the Installation Information. But this requirement does not apply if neither you nor any third party retains the ability to install modified object code on the User Product (for example, the work has been installed in ROM).

The requirement to provide Installation Information does not include a requirement to continue to provide support service, warranty, or updates for a work that has been modified or installed by the recipient, or for the User Product in which it has been modified or installed. Access to a network may be denied when the modification itself materially and adversely affects the operation of the network or violates the rules and protocols for communication across the network.

Corresponding Source conveyed, and Installation Information provided, in accord with this section must be in a format that is publicly documented (and with an implementation available to the public in source code form), and must require no special password or key for unpacking, reading or copying.

7. Additional Terms.

"Additional permissions" are terms that supplement the terms of this License by making exceptions from one or more of its conditions. Additional permissions that are applicable to the entire Program shall be treated as though they were included in this License, to the extent that they are valid under applicable law. If additional permissions apply only to part of the Program, that part may be used separately under those permissions, but the entire Program remains governed by this License without regard to the additional permissions.

When you convey a copy of a covered work, you may at your option remove any additional permissions from that copy, or from any part of it. (Additional permissions may be written to require their own removal in certain cases when you modify the work.) You may place additional permissions on material, added by you to a covered work, for which you have or can give appropriate copyright permission.

Notwithstanding any other provision of this License, for material you add to a covered work, you may (if authorized by the copyright holders of that material) supplement the terms of this License with terms:

- a) Disclaiming warranty or limiting liability differently from the terms of sections 15 and 16 of this License; or
- b) Requiring preservation of specified reasonable legal notices or author attributions in that material or in the Appropriate Legal Notices displayed by works containing it; or
- c) Prohibiting misrepresentation of the origin of that material, or requiring that modified versions of such material be marked in reasonable ways as different from the original version; or
- d) Limiting the use for publicity purposes of names of licensors or authors of the material; or
- e) Declining to grant rights under trademark law for use of some trade names, trademarks, or service marks; or
- f) Requiring indemnification of licensors and authors of that material by anyone who conveys the material (or modified versions of it) with contractual assumptions of liability to the recipient, for any liability that these contractual assumptions directly impose on those licensors and authors.

All other non-permissive additional terms are considered "further restrictions" within the meaning of section 10. If the Program as you received it, or any part of it, contains a notice stating that it is governed by this License along with a term that is a further restriction, you may remove that term. If a license document contains a further restriction but permits relicensing or conveying under this License, you may add to a covered work material governed by the terms of that license document, provided that the further restriction does not survive such relicensing or conveying.

If you add terms to a covered work in accord with this section, you must place, in the relevant source files, a statement of the additional terms that apply to those files, or a notice indicating where to find the applicable terms.

Additional terms, permissive or non-permissive, may be stated in the form of a separately written license, or stated as exceptions; the above requirements apply either way.

8. Termination.

You may not propagate or modify a covered work except as expressly provided under this License. Any attempt otherwise to propagate or modify it is void, and will automatically terminate your rights under this License (including any patent licenses granted under the third paragraph of section 11).

However, if you cease all violation of this License, then your license from a particular copyright holder is reinstated (a) provisionally, unless and until the copyright holder explicitly and finally terminates your license, and (b) permanently, if the copyright holder fails to notify you of the violation by some reasonable means prior to 60 days after the cessation.

Moreover, your license from a particular copyright holder is reinstated permanently if the copyright holder notifies you of the violation by some reasonable means, this is the first time you have received notice of violation of this License (for any work) from that copyright holder, and you cure the violation prior to 30 days after your receipt of the notice.

Termination of your rights under this section does not terminate the licenses of parties who have received copies or rights from you under this License. If your rights have been terminated and not permanently reinstated, you do not qualify to receive new licenses for the same material under section 10.

9. Acceptance Not Required for Having Copies.

You are not required to accept this License in order to receive or run a copy of the Program. Ancillary propagation of a covered work occurring solely as a consequence of using peer-to-peer transmission to receive a copy likewise does not require acceptance. However, nothing other than this License grants you permission to propagate or modify any covered work. These actions infringe copyright if you do not accept this License. Therefore, by modifying or propagating a covered work, you indicate your acceptance of this License to do so.

10. Automatic Licensing of Downstream Recipients.

Each time you convey a covered work, the recipient automatically receives a license from the original licensors, to run, modify and propagate that work, subject to this License. You are not responsible for enforcing compliance by third parties with this License.

An "entity transaction" is a transaction transferring control of an organization, or substantially all assets of one, or subdividing an organization, or merging organizations. If propagation of a covered work results from an entity

transaction, each party to that transaction who receives a copy of the work also receives whatever licenses to the work the party's predecessor in interest had or could give under the previous paragraph, plus a right to possession of the Corresponding Source of the work from the predecessor in interest, if the predecessor has it or can get it with reasonable efforts.

You may not impose any further restrictions on the exercise of the rights granted or affirmed under this License. For example, you may not impose a license fee, royalty, or other charge for exercise of rights granted under this License, and you may not initiate litigation (including a cross-claim or counterclaim in a lawsuit) alleging that any patent claim is infringed by making, using, selling, offering for sale, or importing the Program or any portion of it. 11. Patents.

A "contributor" is a copyright holder who authorizes use under this License of the Program or a work on which the Program is based. The work thus licensed is called the contributor's "contributor version".

A contributor's "essential patent claims" are all patent claims owned or controlled by the contributor, whether already acquired or hereafter acquired, that would be infringed by some manner, permitted by this License, of making, using, or selling its contributor version, but do not include claims that would be infringed only as a consequence of further modification of the contributor version. For purposes of this definition, "control" includes the right to grant patent sublicenses in a manner consistent with the requirements of this License.

Each contributor grants you a non-exclusive, worldwide, royalty-free patent license under the contributor's essential patent claims, to make, use, sell, offer for sale, import and otherwise run, modify and propagate the contents of its contributor version.

In the following three paragraphs, a "patent license" is any express agreement or commitment, however denominated, not to enforce a patent (such as an express permission to practice a patent or covenant not to sue for patent infringement). To "grant" such a patent license to a party means to make such an agreement or commitment not to enforce a patent against the party.

If you convey a covered work, knowingly relying on a patent license, and the Corresponding Source of the work is not available for anyone to copy, free of charge and under the terms of this License, through a publicly available network server or other readily accessible means, then you must either (1) cause the Corresponding Source to be so available, or (2) arrange to deprive yourself of the benefit of the patent license for this particular work, or (3) arrange, in a manner consistent with the requirements of this License, to extend the patent license to downstream recipients. "Knowingly relying" means you have actual knowledge that, but for the patent license,

your conveying the covered work in a country, or your recipient's use of the covered work in a country, would infringe one or more identifiable patents in that country that you have reason to believe are valid.

If, pursuant to or in connection with a single transaction or arrangement, you convey, or propagate by procuring conveyance of, a covered work, and grant a patent license to some of the parties receiving the covered work authorizing them to use, propagate, modify or convey a specific copy of the covered work, then the patent license you grant is automatically extended to all recipients of the covered work and works based on it.

A patent license is "discriminatory" if it does not include within the scope of its coverage, prohibits the exercise of, or is conditioned on the non-exercise of one or more of the rights that are specifically granted under this License. You may not convey a covered work if you are a party to an arrangement with a third party that is in the business of distributing software, under which you make payment to the third party based on the extent of your activity of conveying the work, and under which the third party grants, to any of the parties who would receive the covered work from you, a discriminatory patent license (a) in connection with copies of the covered work conveyed by you (or copies made from those copies), or (b) primarily for and in connection with specific products or compilations that contain the covered work, unless you entered into that arrangement, or that patent license was granted, prior to 28 March 2007.

Nothing in this License shall be construed as excluding or limiting any implied license or other defenses to infringement that may otherwise be available to you under applicable patent law.

12. No Surrender of Others' Freedom.

If 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 convey a covered work so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not convey it at all. For example, if you agree to terms that obligate you to collect a royalty for further conveying from those to whom you convey the Program, the only way you could satisfy both those terms and this License would be to refrain entirely from conveying the Program.

13. Use with the GNU Affero General Public License.

Notwithstanding any other provision of this License, you have permission to link or combine any covered work with a work licensed under version 3 of the GNU Affero General Public License into a single combined work, and to convey the resulting work. The terms of this License will continue to apply to the part which is the covered work, but the special requirements of the GNU Affero General Public License, section 13, concerning interaction through a network will apply to the combination as such.

14. Revised Versions of this License.

The Free Software Foundation may publish revised and/or new versions of the GNU 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 that a certain numbered version of the GNU General Public License "or any later version" applies to it, you have the option of following the terms and conditions either of that numbered version or of any later version published by the Free Software Foundation. If the Program does not specify a version number of the GNU General Public License, you may choose any version ever published by the Free Software Foundation.

If the Program specifies that a proxy can decide which future versions of the GNU General Public License can be used, that proxy's public statement of acceptance of a version permanently authorizes you to choose that version for the Program.

Later license versions may give you additional or different permissions. However, no additional obligations are imposed on any author or copyright holder as a result of your choosing to follow a later version.

15. Disclaimer of Warranty.

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.

16. Limitation of Liability.

IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MODIFIES AND/OR CONVEYS 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.

17. Interpretation of Sections 15 and 16.

If the disclaimer of warranty and limitation of liability provided above cannot be given local legal effect according to their terms, reviewing courts shall apply local law that most closely approximates an absolute waiver of all civil liability in connection with the Program, unless a warranty or assumption of liability accompanies a copy of the Program in return for a fee.

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 state 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 3 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, see https://www.gnu.org/licenses/.

Also add information on how to contact you by electronic and paper mail.

If the program does terminal interaction, make it output a short notice like this when it starts in an interactive mode:

This program 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, your program's commands might be different; for a GUI interface, you would use an "about box".

You should also get your employer (if you work as a programmer) or school, if any, to sign a "copyright disclaimer" for the program, if necessary. For more information on this, and how to apply and follow the GNU GPL, see https://www.gnu.org/licenses/.

The GNU 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. But first, please read https://www.gnu.org/licenses/why-not-lgpl.html.

Apache License 2.0

Identifier: Apache-2.0

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.

Mozilla Public License 2.0

Identifier: MPL-2.0

Mozilla Public License Version 2.0

1. Definitions

1.1. "Contributor" means each individual or legal entity that creates, contributes to the creation of, or owns Covered Software.

- 1.2. "Contributor Version" means the combination of the Contributions of others (if any) used by a Contributor and that particular Contributor's Contribution.
- 1.3. "Contribution" means Covered Software of a particular Contributor.
- 1.4. "Covered Software" means Source Code Form to which the initial Contributor has attached the notice in Exhibit A, the Executable Form of such Source Code Form, and Modifications of such Source Code Form, in each case including portions thereof.
- 1.5. "Incompatible With Secondary Licenses" means
 - (a) that the initial Contributor has attached the notice described in Exhibit B to the Covered Software; or
 - (b) that the Covered Software was made available under the terms of version 1.1 or earlier of the License, but not also under the terms of a Secondary License.
- 1.6. "Executable Form" means any form of the work other than Source Code Form.
- 1.7. "Larger Work" means a work that combines Covered Software with other material, in a separate file or files, that is not Covered Software.
- 1.8. "License" means this document.
- 1.9. "Licensable" means having the right to grant, to the maximum extent possible, whether at the time of the initial grant or subsequently, any and all of the rights conveyed by this License.
- 1.10. "Modifications" means any of the following:
 - (a) any file in Source Code Form that results from an addition to, deletion from, or modification of the contents of Covered Software; or
 - (b) any new file in Source Code Form that contains any Covered Software.
- 1.11. "Patent Claims" of a Contributor means any patent claim(s), including without limitation, method, process, and apparatus claims, in any patent Licensable by such Contributor that would be infringed, but for the grant of the License, by the making, using, selling, offering for sale, having made, import, or transfer of either its Contributions or its Contributor Version.
- 1.12. "Secondary License" means either the GNU General Public License, Version 2.0, the GNU Lesser General Public License, Version 2.1, the GNU Affero General Public License, Version 3.0, or any later versions of those licenses.
- 1.13. "Source Code Form" means the form of the work preferred for making modifications.
- 1.14. "You" (or "Your") means an individual or a legal entity exercising rights under this License. For legal entities, "You" includes any entity that 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 and Conditions

2.1. Grants

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 such Contributor to use, reproduce, make available, modify, display, perform, distribute, and otherwise exploit its Contributions, either on an unmodified basis, with Modifications, or as part of a Larger Work; and (b) under Patent Claims of such Contributor to make, use, sell, offer for sale, have made, import, and otherwise transfer either its Contributions or its Contributor Version.

2.2. Effective Date

The licenses granted in Section 2.1 with respect to any Contribution become effective for each Contribution on the date the Contributor first distributes such Contribution.

2.3. Limitations on Grant Scope

The licenses granted in this Section 2 are the only rights granted under this License. No additional rights or licenses will be implied from the distribution or licensing of Covered Software under this License. Notwithstanding Section 2.1(b) above, no patent license is granted by a Contributor:

- (a) for any code that a Contributor has removed from Covered Software; or
- (b) for infringements caused by: (i) Your and any other third party's modifications of Covered Software, or (ii) the combination of its Contributions with other software (except as part of its Contributor Version); or
- (c) under Patent Claims infringed by Covered Software in the absence of its Contributions.

This License does not grant any rights in the trademarks, service marks, or logos of any Contributor (except as may be necessary to comply with the notice requirements in Section 3.4).

2.4. Subsequent Licenses

No Contributor makes additional grants as a result of Your choice to distribute the Covered Software under a subsequent version of this License (see Section 10.2) or under the terms of a Secondary License (if permitted under the terms of Section 3.3).

2.5. Representation

Each Contributor represents that the Contributor believes its Contributions are its original creation(s) or it has sufficient rights to grant the rights to its Contributions conveyed by this License.

2.6. Fair Use

This License is not intended to limit any rights You have under applicable copyright doctrines of fair use, fair dealing, or other equivalents.

2.7. Conditions

Sections 3.1, 3.2, 3.3, and 3.4 are conditions of the licenses granted in Section 2.1.

3. Responsibilities

3.1. Distribution of Source Form

All distribution of Covered Software in Source Code Form, including any Modifications that You create or to which You contribute, must be under the terms of this License. You must inform recipients that the Source Code Form of the Covered Software is governed by the terms of this License, and how they can obtain a copy of this License. You may not attempt to alter or restrict the recipients' rights in the Source Code Form.

3.2. Distribution of Executable Form

If You distribute Covered Software in Executable Form then:

(a) such Covered Software must also be made available in Source Code Form, as described in Section 3.1, and You must inform recipients of the Executable Form how they can obtain a copy of such Source

Code Form by reasonable means in a timely manner, at a charge no more than the cost of distribution to the recipient; and

(b) You may distribute such Executable Form under the terms of this License, or sublicense it under different terms, provided that the license for the Executable Form does not attempt to limit or alter the recipients' rights in the Source Code Form under this License.

3.3. Distribution of a Larger Work

You may create and distribute a Larger Work under terms of Your choice, provided that You also comply with the requirements of this License for the Covered Software. If the Larger Work is a combination of Covered Software with a work governed by one or more Secondary Licenses, and the Covered Software is not Incompatible With Secondary Licenses, this License permits You to additionally distribute such Covered Software under the terms of such Secondary License(s), so that the recipient of the Larger Work may, at their option, further distribute the Covered Software under the terms of either this License or such Secondary License(s).

3.4. Notices

You may not remove or alter the substance of any license notices (including copyright notices, patent notices, disclaimers of warranty, or limitations of liability) contained within the Source Code Form of the Covered Software, except that You may alter any license notices to the extent required to remedy known factual inaccuracies.

3.5. Application of Additional Terms

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 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 every Contributor for any liability incurred by such Contributor as a result of warranty, support, indemnity or liability terms You offer. You may include additional disclaimers of warranty and limitations of liability specific to any jurisdiction.

4.	Inability	to	Comply	Due	to	Statute	or	Regulation
т.	masincy	CO	Compry	Duc	CO	Statute	O1	regulation

If it is impossible for You to comply with any of the terms of this License with respect to some or all of the Covered Software due to statute, judicial order, or regulation then You must: (a) comply with the terms of this License to the maximum extent possible; and (b) describe the limitations and the code they affect. Such description must be placed in a text file included with all distributions of the Covered Software under this License. Except to the extent prohibited by statute or regulation, such description must be sufficiently detailed for a recipient of ordinary skill to be able to understand it.

5. Termination

- 5.1. The rights granted under this License will terminate automatically if You fail to comply with any of its terms. However, if You become compliant, then the rights granted under this License from a particular Contributor are reinstated (a) provisionally, unless and until such Contributor explicitly and finally terminates Your grants, and (b) on an ongoing basis, if such Contributor fails to notify You of the non-compliance by some reasonable means prior to 60 days after You have come back into compliance. Moreover, Your grants from a particular Contributor are reinstated on an ongoing basis if such Contributor notifies You of the non-compliance by some reasonable means, this is the first time You have received notice of non-compliance with this License from such Contributor, and You become compliant prior to 30 days after Your receipt of the notice.
- 5.2. If You initiate litigation against any entity by asserting a patent infringement claim (excluding declaratory judgment actions, counter-claims, and cross-claims) alleging that a Contributor Version directly or indirectly infringes any patent, then the rights granted to You by any and all Contributors for the Covered Software under Section 2.1 of this License shall terminate.
- 5.3. In the event of termination under Sections 5.1 or 5.2 above, all end user license agreements (excluding distributors and resellers) which have been validly granted by You or Your distributors under this License prior to termination shall survive termination.

**************************************	*****

Disclaimer of Warranty
o. Discialifier of Walfallty

* _____ *

Covered Software is provided under this License on an "as is" basis, without warranty of any kind, either expressed, implied, or statutory, including, without limitation, warranties that the Covered Software is free of defects, merchantable, fit for a particular purpose or non-infringing. 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 any 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 under this License except under this disclaimer.

7. Limitation of Liability

* _____ *

Under no circumstances and under no legal theory, whether tort (including negligence), contract, or otherwise, shall any Contributor, or anyone who distributes Covered Software as permitted above, be liable to You for any direct, 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. Litigation

Any litigation relating to this License may be brought only in the courts of a jurisdiction where the defendant maintains its principal place of business and such litigation shall be governed by laws of that jurisdiction, without reference to its conflict-of-law provisions. Nothing in this Section shall prevent a party's ability to bring cross-claims or counter-claims.

9. Miscellaneous

This License represents the complete agreement concerning the 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. Any law or regulation which provides that the language of a contract shall be construed against the drafter shall not be used to construe this License against a Contributor.

10. Versions of the License

10.1. New Versions

Mozilla Foundation is the license steward. Except as provided in Section 10.3, no one other than the license steward has the right to modify or publish new versions of this License. Each version will be given a distinguishing version number.

10.2. Effect of New Versions

You may distribute the Covered Software under the terms of the version of the License under which You originally received the Covered Software, or under the terms of any subsequent version published by the license steward.

10.3. Modified Versions

If you create software not governed by this License, and you want to create a new license for such software, you may create and use a modified version of this License if you rename the license and remove any references to the name of the license steward (except to note that such modified license differs from this License).

10.4. Distributing Source Code Form that is Incompatible With Secondary Licenses

If You choose to distribute Source Code Form that is Incompatible With Secondary Licenses under the terms of this version of the License, the notice described in Exhibit B of this License must be attached.

Exhibit A - Source Code Form License Notice

This Source Code Form is subject to the terms of the Mozilla Public License, v. 2.0. If a copy of the MPL was not distributed with this file, You can obtain one at https://mozilla.org/MPL/2.0/.

If it is not possible or desirable to put the notice in a particular file, then You may include the notice in a location (such as a LICENSE file in a relevant directory) where a recipient would be likely to look for such a notice.

You may add additional accurate notices of copyright ownership.

Exhibit B - "Incompatible With Secondary Licenses" Notice

This Source Code Form is "Incompatible With Secondary Licenses", as defined by the Mozilla Public License, v. 2.0.

BSD 3-Clause "New" or "Revised" License

Identifier: BSD-3-Clause

Copyright (c) <year> <owner>.

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 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.

curl License

Identifier: curl

COPYRIGHT AND PERMISSION NOTICE

Copyright (c) 1996 - 2015, Daniel Stenberg, <daniel@haxx.se>. 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.

bzip2 and libbzip2 License v1.0.6

Identifier: bzip2-1.0.6

This program, "bzip2", the associated library "libbzip2", and all documentation, are copyright (C) 1996-2010 Julian R Seward. 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. 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.
- 3. Altered source versions must be plainly marked as such, and must not be misrepresented as being the original software.
- 4. 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 BY THE AUTHOR ``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 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.

Julian Seward, jseward@bzip.org bzip2/libbzip2 version 1.0.6 of 6 September 2010

PATENTS: To the best of my knowledge, bzip2 and libbzip2 do not use any patented algorithms. However, I do not have the resources to carry out a patent search. Therefore I cannot give any guarantee of the above statement.

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

GNU General Public License v2.0 or later

Identifier: GPL-2.0-or-later

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.

TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

O. 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 an idea of what it does.>
Copyright (C) <yyyy> <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, 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.

Boost Software License 1.0

Identifier: BSL-1.0

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.

The Unlicense

Identifier: Unlicense

This is free and unencumbered software released into the public domain.

Anyone is free to copy, modify, publish, use, compile, sell, or distribute this software, either in source code form or as a compiled binary, for any purpose, commercial or non-commercial, and by any means.

In jurisdictions that recognize copyright laws, the author or authors of this software dedicate any and all copyright interest in the software to the public domain. We make this dedication for the benefit of the public at large and to the detriment of our heirs and successors. We intend this dedication to be an overt act of relinquishment in perpetuity of all present and future rights to this software under copyright law.

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 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.

For more information, please refer to https://unlicense.org/

zlib License

Identifier: Zlib

zlib License

Copyright (c) < year > < copyright holders >

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.

GNU Library General Public License v2 or later

Identifier: LGPL-2.0-or-later

GNU LIBRARY GENERAL PUBLIC LICENSE

Version 2, June 1991

Copyright (C) 1991 Free Software Foundation, Inc. 51 Franklin St, 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.

[This is the first released version of the library GPL. It is numbered 2 because it goes with version 2 of the ordinary GPL.]

Preamble

The licenses for most software are designed to take away your freedom to share and change it. By contrast, the GNU General Public Licenses are intended to guarantee your freedom to share and change free software--to make sure the software is free for all its users.

This license, the Library General Public License, applies to some specially designated Free Software Foundation software, and to any other libraries whose authors decide to use it. You can use it for your libraries, 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 library, or if you modify it.

For example, if you distribute copies of the library, whether gratis or for a fee, you must give the recipients all the rights that we gave you. You must make sure that they, too, receive or can get the source code. If you link a program with the library, you must provide complete object files to the recipients so that they can relink them with the library, after making changes to the library and recompiling it. And you must show them these terms so they know their rights.

Our method of protecting your rights has two steps: (1) copyright the library, and (2) offer you this license which gives you legal permission to copy, distribute and/or modify the library.

Also, for each distributor's protection, we want to make certain that everyone understands that there is no warranty for this free library. If the library is modified by someone else and passed on, we want its recipients to know that what they have is not the original version, 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 companies distributing free software will individually obtain patent licenses, thus in effect transforming the program into proprietary software. To prevent this, we have made it clear that any patent must be licensed for everyone's free use or not licensed at all.

Most GNU software, including some libraries, is covered by the ordinary GNU General Public License, which was designed for utility programs. This license, the GNU Library General Public License, applies to certain designated libraries. This license is quite different from the ordinary one; be sure to read it in full, and don't assume that anything in it is the same as in the ordinary license.

The reason we have a separate public license for some libraries is that they blur the distinction we usually make between modifying or adding to a program and simply using it. Linking a program with a library, without changing the library, is in some sense simply using the library, and is analogous to running a utility program or application program. However, in a textual and legal sense, the linked executable is a combined work, a derivative of the original library, and the ordinary General Public License treats it as such.

Because of this blurred distinction, using the ordinary General Public License for libraries did not effectively promote software sharing, because most developers did not use the libraries. We concluded that weaker conditions might promote sharing better.

However, unrestricted linking of non-free programs would deprive the users of those programs of all benefit from the free status of the libraries themselves. This Library General Public License is intended to permit developers of non-free programs to use free libraries, while preserving your freedom as a user of such programs to change the free libraries that are incorporated in them. (We have not seen how to achieve this as regards changes in header files, but we have achieved it as regards changes in the actual functions of the Library.) The hope is that this will lead to faster development of free libraries.

The precise terms and conditions for copying, distribution and modification follow. Pay close attention to the difference between a "work based on the library" and a "work that uses the library". The former contains code derived from the library, while the latter only works together with the library.

Note that it is possible for a library to be covered by the ordinary General Public License rather than by this special one.

GNU LIBRARY GENERAL PUBLIC LICENSE

TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

0. This License Agreement applies to any software library which contains a notice placed by the copyright holder or other authorized party saying it may be distributed under the terms of this Library General Public License (also called "this License"). Each licensee is addressed as "you".

A "library" means a collection of software functions and/or data prepared so as to be conveniently linked with application programs (which use some of those functions and data) to form executables.

The "Library", below, refers to any such software library or work which has been distributed under these terms. A "work based on the Library" means either the Library or any derivative work under copyright law: that is to say, a work containing the Library or a portion of it, either verbatim or with modifications and/or translated straightforwardly into another language. (Hereinafter, translation is included without limitation in the term "modification".)

"Source code" for a work means the preferred form of the work for making modifications to it. For a library, 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 library.

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running a program using the Library is not restricted, and output from such a program is covered only if its contents constitute a work based on the Library (independent of the use of the Library in a tool for writing it). Whether that is true depends on what the Library does and what the program that uses the Library does.

1. You may copy and distribute verbatim copies of the Library's complete 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 distribute a copy of this License along with the Library.

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 Library or any portion of it, thus forming a work based on the Library, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:
 - a) The modified work must itself be a software library.
 - b) You must cause the files modified to carry prominent notices stating that you changed the files and the date of any change.
 - c) You must cause the whole of the work to be licensed at no charge to all third parties under the terms of this License.
 - d) If a facility in the modified Library refers to a function or a table of data to be supplied by an application program that uses the facility, other than as an argument passed when the facility is invoked, then you must make a good faith effort to ensure that, in the event an application does not supply such function or table, the facility still operates, and performs whatever part of its purpose remains meaningful.

(For example, a function in a library to compute square roots has a purpose that is entirely well-defined independent of the application. Therefore, Subsection 2d requires that any application-supplied function or table used by this function must be optional: if the application does not supply it, the square root function must still compute square roots.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Library, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Library, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

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 Library.

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

3. You may opt to apply the terms of the ordinary GNU General Public License instead of this License to a given copy of the Library. To do this, you must alter all the notices that refer to this License, so that they refer to the ordinary GNU General Public License, version 2, instead of to this License. (If a newer version than version 2 of the ordinary GNU General Public License has appeared, then you can specify that version instead if you wish.) Do not make any other change in these notices.

Once this change is made in a given copy, it is irreversible for that copy, so the ordinary GNU General Public License applies to all subsequent copies and derivative works made from that copy.

This option is useful when you wish to copy part of the code of the Library into a program that is not a library.

4. You may copy and distribute the Library (or a portion or derivative of it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you 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.

If distribution of 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 satisfies the requirement to distribute the source code, even though third parties are not compelled to copy the source along with the object code.

5. A program that contains no derivative of any portion of the Library, but is designed to work with the Library by being compiled or linked with it, is called a "work that uses the Library". Such a work, in isolation, is not a derivative work of the Library, and therefore falls outside the scope of this License.

However, linking a "work that uses the Library" with the Library creates an executable that is a derivative of the Library (because it contains portions of the Library), rather than a "work that uses the library". The executable is therefore covered by this License. Section 6 states terms for distribution of such executables.

When a "work that uses the Library" uses material from a header file that is part of the Library, the object code for the work may be a derivative work of the Library even though the source code is not. Whether this is true is especially significant if the work can be linked without the Library, or if the work is itself a library. The threshold for this to be true is not precisely defined by law.

If such an object file uses only numerical parameters, data structure layouts and accessors, and small macros and small inline functions (ten lines or less in length), then the use of the object file is unrestricted, regardless of whether it is legally a derivative work. (Executables containing this object code plus portions of the Library will still fall under Section 6.)

Otherwise, if the work is a derivative of the Library, you may distribute the object code for the work under the terms of Section 6. Any executables containing that work also fall under Section 6, whether or not they are linked directly with the Library itself.

6. As an exception to the Sections above, you may also compile or link a "work that uses the Library" with the Library to produce a work containing portions of the Library, and distribute that work under terms of your choice, provided that the terms permit modification of the work for the customer's own use and reverse engineering for debugging such modifications.

You must give prominent notice with each copy of the work that the Library is used in it and that the Library and its use are covered by this License. You must supply a copy of this License. If the work during execution displays copyright notices, you must include the copyright notice for the Library among them, as well as a reference directing the user to the copy of this License. Also, you must do one of these things:

a) Accompany the work with the complete corresponding machine-readable source code for the Library including whatever changes were used in the work (which must be distributed under Sections 1 and 2 above); and, if the work is an executable linked with the Library, with the complete machine-readable "work

that uses the Library", as object code and/or source code, so that the user can modify the Library and then relink to produce a modified executable containing the modified Library. (It is understood that the user who changes the contents of definitions files in the Library will not necessarily be able to recompile the application to use the modified definitions.)

- b) Accompany the work with a written offer, valid for at least three years, to give the same user the materials specified in Subsection 6a, above, for a charge no more than the cost of performing this distribution.
- c) If distribution of the work is made by offering access to copy from a designated place, offer equivalent access to copy the above specified materials from the same place.
- d) Verify that the user has already received a copy of these materials or that you have already sent this user a copy.

For an executable, the required form of the "work that uses the Library" must include any data and utility programs needed for reproducing the executable from it. However, as a special exception, the 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.

It may happen that this requirement contradicts the license restrictions of other proprietary libraries that do not normally accompany the operating system. Such a contradiction means you cannot use both them and the Library together in an executable that you distribute.

- 7. You may place library facilities that are a work based on the Library side-by-side in a single library together with other library facilities not covered by this License, and distribute such a combined library, provided that the separate distribution of the work based on the Library and of the other library facilities is otherwise permitted, and provided that you do these two things:
 - a) Accompany the combined library with a copy of the same work based on the Library, uncombined with any other library facilities. This must be distributed under the terms of the Sections above.
 - b) Give prominent notice with the combined library of the fact that part of it is a work based on the Library, and explaining where to find the accompanying uncombined form of the same work.
- 8. You may not copy, modify, sublicense, link with, or distribute the Library except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense, link with, or distribute the Library 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.

- 9. 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 Library or its derivative works. These actions are prohibited by law if you do not accept this License. Therefore, by modifying or distributing the Library (or any work based on the Library), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Library or works based on it.
- 10. Each time you redistribute the Library (or any work based on the Library), the recipient automatically receives a license from the original licensor to copy, distribute, link with or modify the Library 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.
- 11. 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 Library at all. For example, if a patent license would not permit royalty-free redistribution of the Library 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 Library.

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.

12. If the distribution and/or use of the Library is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Library 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.

13. The Free Software Foundation may publish revised and/or new versions of the Library 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 Library 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 Library does not specify a license version number, you may choose any version ever published by the Free Software Foundation.

14. If you wish to incorporate parts of the Library into other free programs whose distribution conditions are incompatible with these, 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

- 15. BECAUSE THE LIBRARY IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE LIBRARY, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE LIBRARY "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 LIBRARY IS WITH YOU. SHOULD THE LIBRARY PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.
- 16. 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 LIBRARY 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 LIBRARY (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 LIBRARY TO OPERATE WITH ANY OTHER SOFTWARE), 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 Libraries

If you develop a new library, and you want it to be of the greatest possible use to the public, we recommend making it free software that everyone can redistribute and change. You can do so by permitting redistribution under these terms (or, alternatively, under the terms of the ordinary General Public License).

To apply these terms, attach the following notices to the library. 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 library's name and an idea of what it does. Copyright (C) year name of author

This library is free software; you can redistribute it and/or modify it under the terms of the GNU Library General Public License as published by the Free Software Foundation; either version 2 of the License, or (at your option) any later version.

This library 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 Library General Public License for more details.

You should have received a copy of the GNU Library General Public License along with this library; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301, USA.

Also add information on how to contact you by electronic and paper mail.

You should also get your employer (if you work as a programmer) or your school, if any, to sign a "copyright disclaimer" for the library, if necessary. Here is a sample; alter the names:

Yoyodyne, Inc., hereby disclaims all copyright interest in the library `Frob' (a library for tweaking knobs) written by James Random Hacker.

signature of Ty Coon, 1 April 1990 Ty Coon, President of Vice That's all there is to it!

BSD 2-Clause "Simplified" License

Identifier: BSD-2-Clause

Copyright (c) < year > < owner > .

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.

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.

Fraunhofer FDK AAC Codec Library

Identifier: FDK-AAC

Software License for The Fraunhofer FDK AAC Codec Library for Android

© Copyright 1995 - 2012 Fraunhofer-Gesellschaft zur Förderung der angewandten Forschung e.V.

All rights reserved.

1.INTRODUCTION

The Fraunhofer FDK AAC Codec Library for Android ("FDK AAC Codec") is software that implements the MPEG Advanced Audio Coding ("AAC") encoding and decoding scheme for digital audio. This FDK AAC Codec software is intended to be used on a wide variety of Android devices.

AAC's HE-AAC and HE-AAC v2 versions are regarded as today's most efficient general perceptual audio codecs. AAC-ELD is considered the best-performing full-bandwidth communications codec by independent studies and is widely deployed. AAC has been standardized by ISO and IEC as part of the MPEG specifications.

Patent licenses for necessary patent claims for the FDK AAC Codec (including those of Fraunhofer) may be obtained through Via Licensing (www.vialicensing.com) or through the respective patent owners individually for the purpose of encoding or decoding bit streams in products that are compliant with the ISO/IEC MPEG audio standards. Please note that most manufacturers of Android devices already license these patent claims through Via Licensing or directly from the patent owners, and therefore FDK AAC Codec software may already be covered under those patent licenses when it is used for those licensed purposes only.

Commercially-licensed AAC software libraries, including floating-point versions with enhanced sound quality, are also available from Fraunhofer. Users are encouraged to check the Fraunhofer website for additional applications information and documentation.

2.COPYRIGHT LICENSE

Redistribution and use in source and binary forms, with or without modification, are permitted without payment of copyright license fees provided that you satisfy the following conditions:

You must retain the complete text of this software license in redistributions of the FDK AAC Codec or your modifications thereto in source code form.

You must retain the complete text of this software license in the documentation and/or other materials provided with redistributions of the FDK AAC Codec or your modifications thereto in binary form. You must make available free of charge copies of the complete source code of the FDK AAC Codec and your modifications thereto to recipients of copies in binary form.

The name of Fraunhofer may not be used to endorse or promote products derived from this library without prior written permission.

You may not charge copyright license fees for anyone to use, copy or distribute the FDK AAC Codec software or your modifications thereto.

Your modified versions of the FDK AAC Codec must carry prominent notices stating that you changed the software and the date of any change. For modified versions of the FDK AAC Codec, the term "Fraunhofer FDK AAC Codec Library for Android" must be replaced by the term "Third-Party Modified Version of the Fraunhofer FDK AAC Codec Library for Android."

3.NO PATENT LICENSE

NO EXPRESS OR IMPLIED LICENSES TO ANY PATENT CLAIMS, including without limitation the patents of Fraunhofer, ARE GRANTED BY THIS SOFTWARE LICENSE. Fraunhofer provides no warranty of patent non-infringement with respect to this software.

You may use this FDK AAC Codec software or modifications thereto only for purposes that are authorized by appropriate patent licenses.

4.DISCLAIMER

This FDK AAC Codec software is provided by Fraunhofer on behalf of the copyright holders and contributors "AS IS" and WITHOUT ANY EXPRESS OR IMPLIED WARRANTIES, including but not limited to the implied warranties of merchantability and fitness for a particular purpose. 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), arising in any way out of the use of this software, even if advised of the possibility of such damage.

5.CONTACT INFORMATION

Fraunhofer Institute for Integrated Circuits IIS Attention: Audio and Multimedia Departments - FDK AAC LL Am Wolfsmantel 33 91058 Erlangen, Germany

www.iis.fraunhofer.de/amm amm-info@iis.fraunhofer.de

GNU General Public License v3.0 only

Identifier: GPL-3.0-only

GNU GENERAL PUBLIC LICENSE Version 3, 29 June 2007

Copyright © 2007 Free Software Foundation, Inc. https://fsf.org/

Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed.

Preamble

The GNU General Public License is a free, copyleft license for software and other kinds of works.

The licenses for most software and other practical works are designed to take away your freedom to share and change the works. By contrast, the GNU General Public License is intended to guarantee your freedom to share and change all versions of a program--to make sure it remains free software for all its users. We, the Free Software Foundation, use the GNU General Public License for most of our software; it applies also to any other work released this way by its authors. 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 them 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 prevent others from denying you these rights or asking you to surrender the rights. Therefore, you have certain responsibilities if you distribute copies of the software, or if you modify it: responsibilities to respect the freedom of others.

For example, if you distribute copies of such a program, whether gratis or for a fee, you must pass on to the recipients the same freedoms that you received. 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.

Developers that use the GNU GPL protect your rights with two steps: (1) assert copyright on the software, and (2) offer you this License giving you legal permission to copy, distribute and/or modify it.

For the developers' and authors' protection, the GPL clearly explains that there is no warranty for this free software. For both users' and authors' sake, the GPL requires that modified versions be marked as changed, so that their problems will not be attributed erroneously to authors of previous versions.

Some devices are designed to deny users access to install or run modified versions of the software inside them, although the manufacturer can do so. This is fundamentally incompatible with the aim of protecting users' freedom to change the software. The systematic pattern of such abuse occurs in the area of products for individuals to use, which is precisely where it is most unacceptable. Therefore, we have designed this version of the GPL to prohibit the practice for those products. If such problems arise substantially in other domains, we stand ready to extend this provision to those domains in future versions of the GPL, as needed to protect the freedom of users.

Finally, every program is threatened constantly by software patents. States should not allow patents to restrict development and use of software on general-purpose computers, but in those that do, we wish to avoid the special danger that patents applied to a free program could make it effectively proprietary. To prevent this, the GPL assures that patents cannot be used to render the program non-free.

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

TERMS AND CONDITIONS

0. Definitions.

"This License" refers to version 3 of the GNU General Public License.

"Copyright" also means copyright-like laws that apply to other kinds of works, such as semiconductor masks.

"The Program" refers to any copyrightable work licensed under this License. Each licensee is addressed as "you". "Licensees" and "recipients" may be individuals or organizations.

To "modify" a work means to copy from or adapt all or part of the work in a fashion requiring copyright permission, other than the making of an exact copy. The resulting work is called a "modified version" of the earlier work or a work "based on" the earlier work.

A "covered work" means either the unmodified Program or a work based on the Program.

To "propagate" a work means to do anything with it that, without permission, would make you directly or secondarily liable for infringement under applicable copyright law, except executing it on a computer or modifying a private copy. Propagation includes copying, distribution (with or without modification), making available to the public, and in some countries other activities as well.

To "convey" a work means any kind of propagation that enables other parties to make or receive copies. Mere interaction with a user through a computer network, with no transfer of a copy, is not conveying.

An interactive user interface displays "Appropriate Legal Notices" to the extent that it includes a convenient and prominently visible feature that (1) displays an appropriate copyright notice, and (2) tells the user that there is no warranty for the work (except to the extent that warranties are provided), that licensees may convey the work under this License, and how to view a copy of this License. If the interface presents a list of user commands or options, such as a menu, a prominent item in the list meets this criterion.

1. Source Code.

The "source code" for a work means the preferred form of the work for making modifications to it. "Object code" means any non-source form of a work.

A "Standard Interface" means an interface that either is an official standard defined by a recognized standards body, or, in the case of interfaces specified for a particular programming language, one that is widely used among developers working in that language.

The "System Libraries" of an executable work include anything, other than the work as a whole, that (a) is included in the normal form of packaging a Major Component, but which is not part of that Major Component, and (b) serves only to enable use of the work with that Major Component, or to implement a Standard Interface for which an implementation is available to the public in source code form. A "Major Component", in this context, means a major essential component (kernel, window system, and so on) of the specific operating system (if any) on which the executable work runs, or a compiler used to produce the work, or an object code interpreter used to run it.

The "Corresponding Source" for a work in object code form means all the source code needed to generate, install, and (for an executable work) run the object code and to modify the work, including scripts to control those activities. However, it does not include the work's System Libraries, or general-purpose tools or generally

available free programs which are used unmodified in performing those activities but which are not part of the work. For example, Corresponding Source includes interface definition files associated with source files for the work, and the source code for shared libraries and dynamically linked subprograms that the work is specifically designed to require, such as by intimate data communication or control flow between those subprograms and other parts of the work.

The Corresponding Source need not include anything that users can regenerate automatically from other parts of the Corresponding Source.

The Corresponding Source for a work in source code form is that same work.

2. Basic Permissions.

All rights granted under this License are granted for the term of copyright on the Program, and are irrevocable provided the stated conditions are met. This License explicitly affirms your unlimited permission to run the unmodified Program. The output from running a covered work is covered by this License only if the output, given its content, constitutes a covered work. This License acknowledges your rights of fair use or other equivalent, as provided by copyright law.

You may make, run and propagate covered works that you do not convey, without conditions so long as your license otherwise remains in force. You may convey covered works to others for the sole purpose of having them make modifications exclusively for you, or provide you with facilities for running those works, provided that you comply with the terms of this License in conveying all material for which you do not control copyright. Those thus making or running the covered works for you must do so exclusively on your behalf, under your direction and control, on terms that prohibit them from making any copies of your copyrighted material outside their relationship with you.

Conveying under any other circumstances is permitted solely under the conditions stated below. Sublicensing is not allowed; section 10 makes it unnecessary.

3. Protecting Users' Legal Rights From Anti-Circumvention Law.

No covered work shall be deemed part of an effective technological measure under any applicable law fulfilling obligations under article 11 of the WIPO copyright treaty adopted on 20 December 1996, or similar laws prohibiting or restricting circumvention of such measures.

When you convey a covered work, you waive any legal power to forbid circumvention of technological measures to the extent such circumvention is effected by exercising rights under this License with respect to the covered work, and you disclaim any intention to limit operation or modification of the work as a means of enforcing, against the work's users, your or third parties' legal rights to forbid circumvention of technological measures.

4. Conveying Verbatim Copies.

You may convey 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; keep intact all notices stating that this License and any non-permissive terms added in accord with section 7 apply to the code; keep intact all notices of the absence of any warranty; and give all recipients a copy of this License along with the Program.

You may charge any price or no price for each copy that you convey, and you may offer support or warranty protection for a fee.

5. Conveying Modified Source Versions.

You may convey a work based on the Program, or the modifications to produce it from the Program, in the form of source code under the terms of section 4, provided that you also meet all of these conditions:

- a) The work must carry prominent notices stating that you modified it, and giving a relevant date.
- b) The work must carry prominent notices stating that it is released under this License and any conditions added under section 7. This requirement modifies the requirement in section 4 to "keep intact all notices".
- c) You must license the entire work, as a whole, under this License to anyone who comes into possession of a copy. This License will therefore apply, along with any applicable section 7 additional terms, to the whole of the work, and all its parts, regardless of how they are packaged. This License gives no permission to license the work in any other way, but it does not invalidate such permission if you have separately received it.
- d) If the work has interactive user interfaces, each must display Appropriate Legal Notices; however, if the Program has interactive interfaces that do not display Appropriate Legal Notices, your work need not make them do so.

A compilation of a covered work with other separate and independent works, which are not by their nature extensions of the covered work, and which are not combined with it such as to form a larger program, in or on a volume of a storage or distribution medium, is called an "aggregate" if the compilation and its resulting copyright are not used to limit the access or legal rights of the compilation's users beyond what the individual works

permit. Inclusion of a covered work in an aggregate does not cause this License to apply to the other parts of the aggregate.

6. Conveying Non-Source Forms.

You may convey a covered work in object code form under the terms of sections 4 and 5, provided that you also convey the machine-readable Corresponding Source under the terms of this License, in one of these ways:

- a) Convey the object code in, or embodied in, a physical product (including a physical distribution medium), accompanied by the Corresponding Source fixed on a durable physical medium customarily used for software interchange.
- b) Convey the object code in, or embodied in, a physical product (including a physical distribution medium), accompanied by a written offer, valid for at least three years and valid for as long as you offer spare parts or customer support for that product model, to give anyone who possesses the object code either (1) a copy of the Corresponding Source for all the software in the product that is covered by this License, on a durable physical medium customarily used for software interchange, for a price no more than your reasonable cost of physically performing this conveying of source, or (2) access to copy the Corresponding Source from a network server at no charge.
- c) Convey individual copies of the object code with a copy of the written offer to provide the Corresponding Source. This alternative is allowed only occasionally and noncommercially, and only if you received the object code with such an offer, in accord with subsection 6b.
- d) Convey the object code by offering access from a designated place (gratis or for a charge), and offer equivalent access to the Corresponding Source in the same way through the same place at no further charge. You need not require recipients to copy the Corresponding Source along with the object code. If the place to copy the object code is a network server, the Corresponding Source may be on a different server (operated by you or a third party) that supports equivalent copying facilities, provided you maintain clear directions next to the object code saying where to find the Corresponding Source. Regardless of what server hosts the Corresponding Source, you remain obligated to ensure that it is available for as long as needed to satisfy these requirements.
- e) Convey the object code using peer-to-peer transmission, provided you inform other peers where the object code and Corresponding Source of the work are being offered to the general public at no charge under subsection 6d.

A separable portion of the object code, whose source code is excluded from the Corresponding Source as a System Library, need not be included in conveying the object code work.

A "User Product" is either (1) a "consumer product", which means any tangible personal property which is normally used for personal, family, or household purposes, or (2) anything designed or sold for incorporation into a dwelling. In determining whether a product is a consumer product, doubtful cases shall be resolved in favor of coverage. For a particular product received by a particular user, "normally used" refers to a typical or common use of that class of product, regardless of the status of the particular user or of the way in which the particular user actually uses, or expects or is expected to use, the product. A product is a consumer product regardless of whether the product has substantial commercial, industrial or non-consumer uses, unless such uses represent the only significant mode of use of the product.

"Installation Information" for a User Product means any methods, procedures, authorization keys, or other information required to install and execute modified versions of a covered work in that User Product from a modified version of its Corresponding Source. The information must suffice to ensure that the continued functioning of the modified object code is in no case prevented or interfered with solely because modification has been made.

If you convey an object code work under this section in, or with, or specifically for use in, a User Product, and the conveying occurs as part of a transaction in which the right of possession and use of the User Product is transferred to the recipient in perpetuity or for a fixed term (regardless of how the transaction is characterized), the Corresponding Source conveyed under this section must be accompanied by the Installation Information. But this requirement does not apply if neither you nor any third party retains the ability to install modified object code on the User Product (for example, the work has been installed in ROM).

The requirement to provide Installation Information does not include a requirement to continue to provide support service, warranty, or updates for a work that has been modified or installed by the recipient, or for the User Product in which it has been modified or installed. Access to a network may be denied when the modification itself materially and adversely affects the operation of the network or violates the rules and protocols for communication across the network.

Corresponding Source conveyed, and Installation Information provided, in accord with this section must be in a format that is publicly documented (and with an implementation available to the public in source code form), and must require no special password or key for unpacking, reading or copying.

7. Additional Terms.

"Additional permissions" are terms that supplement the terms of this License by making exceptions from one or more of its conditions. Additional permissions that are applicable to the entire Program shall be treated as though they were included in this License, to the extent that they are valid under applicable law. If additional permissions apply only to part of the Program, that part may be used separately under those permissions, but the entire Program remains governed by this License without regard to the additional permissions.

When you convey a copy of a covered work, you may at your option remove any additional permissions from that copy, or from any part of it. (Additional permissions may be written to require their own removal in certain cases when you modify the work.) You may place additional permissions on material, added by you to a covered work, for which you have or can give appropriate copyright permission.

Notwithstanding any other provision of this License, for material you add to a covered work, you may (if authorized by the copyright holders of that material) supplement the terms of this License with terms:

- a) Disclaiming warranty or limiting liability differently from the terms of sections 15 and 16 of this License; or
- b) Requiring preservation of specified reasonable legal notices or author attributions in that material or in the Appropriate Legal Notices displayed by works containing it; or
- c) Prohibiting misrepresentation of the origin of that material, or requiring that modified versions of such material be marked in reasonable ways as different from the original version; or
- d) Limiting the use for publicity purposes of names of licensors or authors of the material; or
- e) Declining to grant rights under trademark law for use of some trade names, trademarks, or service marks; or
- f) Requiring indemnification of licensors and authors of that material by anyone who conveys the material (or modified versions of it) with contractual assumptions of liability to the recipient, for any liability that these contractual assumptions directly impose on those licensors and authors.

All other non-permissive additional terms are considered "further restrictions" within the meaning of section 10. If the Program as you received it, or any part of it, contains a notice stating that it is governed by this License along with a term that is a further restriction, you may remove that term. If a license document contains a further restriction but permits relicensing or conveying under this License, you may add to a covered work material governed by the terms of that license document, provided that the further restriction does not survive such relicensing or conveying.

If you add terms to a covered work in accord with this section, you must place, in the relevant source files, a statement of the additional terms that apply to those files, or a notice indicating where to find the applicable terms.

Additional terms, permissive or non-permissive, may be stated in the form of a separately written license, or stated as exceptions; the above requirements apply either way.

8. Termination.

You may not propagate or modify a covered work except as expressly provided under this License. Any attempt otherwise to propagate or modify it is void, and will automatically terminate your rights under this License (including any patent licenses granted under the third paragraph of section 11).

However, if you cease all violation of this License, then your license from a particular copyright holder is reinstated (a) provisionally, unless and until the copyright holder explicitly and finally terminates your license, and (b) permanently, if the copyright holder fails to notify you of the violation by some reasonable means prior to 60 days after the cessation.

Moreover, your license from a particular copyright holder is reinstated permanently if the copyright holder notifies you of the violation by some reasonable means, this is the first time you have received notice of violation of this License (for any work) from that copyright holder, and you cure the violation prior to 30 days after your receipt of the notice.

Termination of your rights under this section does not terminate the licenses of parties who have received copies or rights from you under this License. If your rights have been terminated and not permanently reinstated, you do not qualify to receive new licenses for the same material under section 10.

9. Acceptance Not Required for Having Copies.

You are not required to accept this License in order to receive or run a copy of the Program. Ancillary propagation of a covered work occurring solely as a consequence of using peer-to-peer transmission to receive a copy likewise does not require acceptance. However, nothing other than this License grants you permission to propagate or modify any covered work. These actions infringe copyright if you do not accept this License. Therefore, by modifying or propagating a covered work, you indicate your acceptance of this License to do so.

10. Automatic Licensing of Downstream Recipients.

Each time you convey a covered work, the recipient automatically receives a license from the original licensors, to run, modify and propagate that work, subject to this License. You are not responsible for enforcing compliance by third parties with this License.

An "entity transaction" is a transaction transferring control of an organization, or substantially all assets of one, or subdividing an organization, or merging organizations. If propagation of a covered work results from an entity

transaction, each party to that transaction who receives a copy of the work also receives whatever licenses to the work the party's predecessor in interest had or could give under the previous paragraph, plus a right to possession of the Corresponding Source of the work from the predecessor in interest, if the predecessor has it or can get it with reasonable efforts.

You may not impose any further restrictions on the exercise of the rights granted or affirmed under this License. For example, you may not impose a license fee, royalty, or other charge for exercise of rights granted under this License, and you may not initiate litigation (including a cross-claim or counterclaim in a lawsuit) alleging that any patent claim is infringed by making, using, selling, offering for sale, or importing the Program or any portion of it. 11. Patents.

A "contributor" is a copyright holder who authorizes use under this License of the Program or a work on which the Program is based. The work thus licensed is called the contributor's "contributor version".

A contributor's "essential patent claims" are all patent claims owned or controlled by the contributor, whether already acquired or hereafter acquired, that would be infringed by some manner, permitted by this License, of making, using, or selling its contributor version, but do not include claims that would be infringed only as a consequence of further modification of the contributor version. For purposes of this definition, "control" includes the right to grant patent sublicenses in a manner consistent with the requirements of this License.

Each contributor grants you a non-exclusive, worldwide, royalty-free patent license under the contributor's essential patent claims, to make, use, sell, offer for sale, import and otherwise run, modify and propagate the contents of its contributor version.

In the following three paragraphs, a "patent license" is any express agreement or commitment, however denominated, not to enforce a patent (such as an express permission to practice a patent or covenant not to sue for patent infringement). To "grant" such a patent license to a party means to make such an agreement or commitment not to enforce a patent against the party.

If you convey a covered work, knowingly relying on a patent license, and the Corresponding Source of the work is not available for anyone to copy, free of charge and under the terms of this License, through a publicly available network server or other readily accessible means, then you must either (1) cause the Corresponding Source to be so available, or (2) arrange to deprive yourself of the benefit of the patent license for this particular work, or (3) arrange, in a manner consistent with the requirements of this License, to extend the patent license to downstream recipients. "Knowingly relying" means you have actual knowledge that, but for the patent license,

your conveying the covered work in a country, or your recipient's use of the covered work in a country, would infringe one or more identifiable patents in that country that you have reason to believe are valid.

If, pursuant to or in connection with a single transaction or arrangement, you convey, or propagate by procuring conveyance of, a covered work, and grant a patent license to some of the parties receiving the covered work authorizing them to use, propagate, modify or convey a specific copy of the covered work, then the patent license you grant is automatically extended to all recipients of the covered work and works based on it.

A patent license is "discriminatory" if it does not include within the scope of its coverage, prohibits the exercise of, or is conditioned on the non-exercise of one or more of the rights that are specifically granted under this License. You may not convey a covered work if you are a party to an arrangement with a third party that is in the business of distributing software, under which you make payment to the third party based on the extent of your activity of conveying the work, and under which the third party grants, to any of the parties who would receive the covered work from you, a discriminatory patent license (a) in connection with copies of the covered work conveyed by you (or copies made from those copies), or (b) primarily for and in connection with specific products or compilations that contain the covered work, unless you entered into that arrangement, or that patent license was granted, prior to 28 March 2007.

Nothing in this License shall be construed as excluding or limiting any implied license or other defenses to infringement that may otherwise be available to you under applicable patent law.

12. No Surrender of Others' Freedom.

If 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 convey a covered work so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not convey it at all. For example, if you agree to terms that obligate you to collect a royalty for further conveying from those to whom you convey the Program, the only way you could satisfy both those terms and this License would be to refrain entirely from conveying the Program.

13. Use with the GNU Affero General Public License.

Notwithstanding any other provision of this License, you have permission to link or combine any covered work with a work licensed under version 3 of the GNU Affero General Public License into a single combined work, and to convey the resulting work. The terms of this License will continue to apply to the part which is the covered work, but the special requirements of the GNU Affero General Public License, section 13, concerning interaction through a network will apply to the combination as such.

14. Revised Versions of this License.

The Free Software Foundation may publish revised and/or new versions of the GNU 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 that a certain numbered version of the GNU General Public License "or any later version" applies to it, you have the option of following the terms and conditions either of that numbered version or of any later version published by the Free Software Foundation. If the Program does not specify a version number of the GNU General Public License, you may choose any version ever published by the Free Software Foundation.

If the Program specifies that a proxy can decide which future versions of the GNU General Public License can be used, that proxy's public statement of acceptance of a version permanently authorizes you to choose that version for the Program.

Later license versions may give you additional or different permissions. However, no additional obligations are imposed on any author or copyright holder as a result of your choosing to follow a later version.

15. Disclaimer of Warranty.

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.

16. Limitation of Liability.

IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MODIFIES AND/OR CONVEYS 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.

17. Interpretation of Sections 15 and 16.

If the disclaimer of warranty and limitation of liability provided above cannot be given local legal effect according to their terms, reviewing courts shall apply local law that most closely approximates an absolute waiver of all civil liability in connection with the Program, unless a warranty or assumption of liability accompanies a copy of the Program in return for a fee.

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 state 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 3 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, see https://www.gnu.org/licenses/.

Also add information on how to contact you by electronic and paper mail.

If the program does terminal interaction, make it output a short notice like this when it starts in an interactive mode:

This program 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, your program's commands might be different; for a GUI interface, you would use an "about box".

You should also get your employer (if you work as a programmer) or school, if any, to sign a "copyright disclaimer" for the program, if necessary. For more information on this, and how to apply and follow the GNU GPL, see https://www.gnu.org/licenses/.

The GNU 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. But first, please read https://www.gnu.org/licenses/why-not-lgpl.html.

Python Software Foundation License 2.0

Identifier: PSF-2.0

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 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.

GNU General Public License v2.0 w/Classpath exception

Identifier: GPL-2.0-with-classpath-exception

insert GPL v2 license text here

Class Path Exception

Linking this library statically or dynamically with other modules is making a combined work based on this library. Thus, the terms and conditions of the GNU General Public License cover the whole combination.

As a special exception, the copyright holders of this library give you permission to link this library with independent modules to produce an executable, regardless of the license terms of these independent modules, and to copy and distribute the resulting executable under terms of your choice, provided that you also meet, for each linked independent module, the terms and conditions of the license of that module. An independent module is a module which is not derived from or based on this library. If you modify this library, you may extend this exception to your version of the library, but you are not obligated to do so. If you do not wish to do so, delete this exception statement from your version.

Common Public License 1.0

Identifier: CPL-1.0

Common Public License Version 1.0

THE ACCOMPANYING PROGRAM IS PROVIDED UNDER THE TERMS OF THIS COMMON PUBLIC LICENSE ("AGREEMENT"). ANY USE, REPRODUCTION OR DISTRIBUTION OF THE PROGRAM CONSTITUTES RECIPIENT'S ACCEPTANCE OF THIS AGREEMENT.

1.

DEFINITIONS

"Contribution" means:

- a) in the case of the initial Contributor, the initial code and documentation distributed under this Agreement, and
- b) in the case of each subsequent Contributor:
 - i) changes to the Program, and
 - ii) additions to the Program;

where such changes and/or additions to the Program originate from and are distributed by that particular Contributor. A Contribution 'originates' from a Contributor if it was added to the Program by such Contributor itself or anyone acting on such Contributor's behalf. Contributions do not include additions to the Program which: (i) are separate modules of software distributed in conjunction with the Program under their own license agreement, and (ii) are not derivative works of the Program.

"Contributor" means any person or entity that distributes the Program.

"Licensed Patents" mean patent claims licensable by a Contributor which are necessarily infringed by the use or sale of its Contribution alone or when combined with the Program.

"Program" means the Contributions distributed in accordance with this Agreement.

"Recipient" means anyone who receives the Program under this Agreement, including all Contributors.

2.

GRANT OF RIGHTS

- a) Subject to the terms of this Agreement, each Contributor hereby grants Recipient a non-exclusive, worldwide, royalty-free copyright license to reproduce, prepare derivative works of, publicly display, publicly perform, distribute and sublicense the Contribution of such Contributor, if any, and such derivative works, in source code and object code form.
- b) Subject to the terms of this Agreement, each Contributor hereby grants Recipient a non-exclusive, worldwide, royalty-free patent license under Licensed Patents to make, use, sell, offer to sell, import and otherwise transfer the Contribution of such Contributor, if any, in source code and object code form. This patent license shall apply to the combination of the Contribution and the Program if, at the time the Contribution is added by the Contributor, such addition of the Contribution causes such combination to be covered by the Licensed Patents. The patent license shall not apply to any other combinations which include the Contribution. No hardware per se is licensed hereunder.
- c) Recipient understands that although each Contributor grants the licenses to its Contributions set forth herein, no assurances are provided by any Contributor that the Program does not infringe the patent or other intellectual property rights of any other entity. Each Contributor disclaims any liability to Recipient for claims brought by any other entity based on infringement of intellectual property rights or otherwise. As a condition to exercising the rights and licenses granted hereunder, each Recipient hereby assumes sole responsibility to secure any other intellectual property rights needed, if any. For example, if a third party patent license is required to allow Recipient to distribute the Program, it is Recipient's responsibility to acquire that license before distributing the Program.
- d) Each Contributor represents that to its knowledge it has sufficient copyright rights in its Contribution, if any, to grant the copyright license set forth in this Agreement.

3.

REQUIREMENTS

A Contributor may choose to distribute the Program in object code form under its own license agreement, provided that:

- a) it complies with the terms and conditions of this Agreement; and
- b) its license agreement:
 - *i)* effectively disclaims on behalf of all Contributors all warranties and conditions, express and implied, including warranties or conditions of title and non-infringement, and implied warranties or conditions of merchantability and fitness for a particular purpose;
 - *ii*) effectively excludes on behalf of all Contributors all liability for damages, including direct, indirect, special, incidental and consequential damages, such as lost profits;
 - iii) states that any provisions which differ from this Agreement are offered by that Contributor alone and not by any other party; and
 - iv) states that source code for the Program is available from such Contributor, and informs licensees how to obtain it in a reasonable manner on or through a medium customarily used for software exchange.

When the Program is made available in source code form:

- a) it must be made available under this Agreement; and
- b) a copy of this Agreement must be included with each copy of the Program.

Contributors may not remove or alter any copyright notices contained within the Program.

Each Contributor must identify itself as the originator of its Contribution, if any, in a manner that reasonably allows subsequent Recipients to identify the originator of the Contribution.

4.

COMMERCIAL DISTRIBUTION

Commercial distributors of software may accept certain responsibilities with respect to end users, business partners and the like. While this license is intended to facilitate the commercial use of the Program, the Contributor who includes the Program in a commercial product offering should do so in a manner which does not create potential liability for other Contributors. Therefore, if a Contributor includes the Program in a commercial product offering, such Contributor ("Commercial Contributor") hereby agrees to defend and indemnify every other Contributor ("Indemnified Contributor") against any losses, damages and costs (collectively "Losses") arising from claims, lawsuits and other legal actions brought by a third party against the Indemnified Contributor to the extent caused by the acts or omissions of such Commercial Contributor in connection with its distribution of the Program in a commercial product offering. The obligations in this section do not apply to any claims or Losses relating to any actual or alleged

intellectual property infringement. In order to qualify, an Indemnified Contributor must: a) promptly notify the Commercial Contributor in writing of such claim, and b) allow the Commercial Contributor to control, and cooperate with the Commercial Contributor in, the defense and any related settlement negotiations. The Indemnified Contributor may participate in any such claim at its own expense.

For example, a Contributor might include the Program in a commercial product offering, Product X. That Contributor is then a Commercial Contributor. If that Commercial Contributor then makes performance claims, or offers warranties related to Product X, those performance claims and warranties are such Commercial Contributor's responsibility alone. Under this section, the Commercial Contributor would have to defend claims against the other Contributors related to those performance claims and warranties, and if a court requires any other Contributor to pay any damages as a result, the Commercial Contributor must pay those damages.

5.

NO WARRANTY

EXCEPT AS EXPRESSLY SET FORTH IN THIS AGREEMENT, THE PROGRAM IS PROVIDED 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. Each Recipient is solely responsible for determining the appropriateness of using and distributing the Program and assumes all risks associated with its exercise of rights under this Agreement, including but not limited to the risks and costs of program errors, compliance with applicable laws, damage to or loss of data, programs or equipment, and unavailability or interruption of operations.

6.

DISCLAIMER OF LIABILITY

EXCEPT AS EXPRESSLY SET FORTH IN THIS AGREEMENT, NEITHER RECIPIENT NOR ANY CONTRIBUTORS SHALL HAVE ANY LIABILITY FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING WITHOUT LIMITATION LOST PROFITS), 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 OR DISTRIBUTION OF THE PROGRAM OR THE EXERCISE OF ANY RIGHTS GRANTED HEREUNDER, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

GENERAL

If any provision of this Agreement is invalid or unenforceable under applicable law, it shall not affect the validity or enforceability of the remainder of the terms of this Agreement, and without further action by the parties hereto, such provision shall be reformed to the minimum extent necessary to make such provision valid and enforceable.

If Recipient institutes patent litigation against a Contributor with respect to a patent applicable to software (including a cross-claim or counterclaim in a lawsuit), then any patent licenses granted by that Contributor to such Recipient under this Agreement shall terminate as of the date such litigation is filed. In addition, if Recipient institutes patent litigation against any entity (including a cross-claim or counterclaim in a lawsuit) alleging that the Program itself (excluding combinations of the Program with other software or hardware) infringes such Recipient's patent(s), then such Recipient's rights granted under Section 2(b) shall terminate as of the date such litigation is filed.

All Recipient's rights under this Agreement shall terminate if it fails to comply with any of the material terms or conditions of this Agreement and does not cure such failure in a reasonable period of time after becoming aware of such noncompliance. If all Recipient's rights under this Agreement terminate, Recipient agrees to cease use and distribution of the Program as soon as reasonably practicable. However, Recipient's obligations under this Agreement and any licenses granted by Recipient relating to the Program shall continue and survive.

Everyone is permitted to copy and distribute copies of this Agreement, but in order to avoid inconsistency the Agreement is copyrighted and may only be modified in the following manner. The Agreement Steward reserves the right to publish new versions (including revisions) of this Agreement from time to time. No one other than the Agreement Steward has the right to modify this Agreement. IBM is the initial Agreement Steward. IBM may assign the responsibility to serve as the Agreement Steward to a suitable separate entity. Each new version of the Agreement will be given a distinguishing version number. The Program (including Contributions) may always be distributed subject to the version of the Agreement under which it was received. In addition, after a new version of the Agreement is published, Contributor may elect to distribute the Program (including its Contributions) under the new version. Except as expressly stated in Sections 2(a) and 2(b) above, Recipient receives no rights or licenses to the intellectual property of any Contributor under this Agreement, whether expressly, by implication, estoppel or otherwise. All rights in the Program not expressly granted under this Agreement are reserved.

This Agreement is governed by the laws of the State of New York and the intellectual property laws of the United States of America. No party to this Agreement will bring a legal action under this Agreement more than one year after the cause of action arose. Each party waives its rights to a jury trial in any resulting litigation.

University of Illinois/NCSA Open Source License

Identifier: NCSA

University of Illinois/NCSA Open Source License

Copyright (c) <Year> <Owner Organization Name>. All rights reserved.

Developed by:

<Name of Development Group>

<Name of Institution>

<URL for Development Group/Institution>

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 <Name of Development Group, Name of Institution>, 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.

The MirOS Licence

Identifier: MirOS

The MirOS Licence

Copyright [YEAR] [NAME] [EMAIL]

Provided that these terms and disclaimer and all copyright notices are retained or reproduced in an accompanying document, permission is granted to deal in this work without restriction, including unlimited rights to use, publicly perform, distribute, sell, modify, merge, give away, or sublicence.

This work is provided "AS IS" and WITHOUT WARRANTY of any kind, to the utmost extent permitted by applicable law, neither express nor implied; without malicious intent or gross negligence. In no event may a licensor, author or contributor be held liable for indirect, direct, other damage, loss, or other issues arising in any way out of dealing in the work, even if advised of the possibility of such damage or existence of a defect, except proven that it results out of said person's immediate fault when using the work as intended.

Lucent Public License Version 1.0

Identifier: LPL-1.0

Lucent Public License Version 1.0

THE ACCOMPANYING PROGRAM IS PROVIDED UNDER THE TERMS OF THIS PUBLIC LICENSE ("AGREEMENT"). ANY USE, REPRODUCTION OR DISTRIBUTION OF THE PROGRAM CONSTITUTES RECIPIENT'S ACCEPTANCE OF THIS AGREEMENT.

1. DEFINITIONS

"Contribution" means:

- a. in the case of <ORGANIZATION> (" <OWNER>"), the Original Program, and
- b. in the case of each Contributor,

i. changes to the Program, and

ii. additions to the Program; where such changes and/or additions to the Program originate from and are "Contributed" by that particular Contributor.

A Contribution is "Contributed" by a Contributor only (i) if it was added to the Program by such Contributor itself or anyone acting on such Contributor's behalf, and (ii) the Contributor explicitly consents, in accordance with Section 3C, to characterization of the changes and/or additions as Contributions. Contributions do not include additions to the Program which: (i) are separate modules of software distributed in conjunction with the Program under their own license agreement, and (ii) are not derivative works of the Program.

"Contributor" means *OWNER* and any other entity that has Contributed a Contribution to the Program.

"Distributor" means a Recipient that distributes the Program, modifications to the Program, or any part thereof.

"Licensed Patents" mean patent claims licensable by a Contributor which are necessarily infringed by the use or sale of its Contribution alone or when combined with the Program.

"Original Program" means the original version of the software accompanying this Agreement as released by *OWNER*>, including source code, object code and documentation, if any.

"Program" means the Original Program and Contributions or any part thereof

"Recipient" means anyone who receives the Program under this Agreement, including all Contributors.

2. GRANT OF RIGHTS

- a. Subject to the terms of this Agreement, each Contributor hereby grants Recipient a non-exclusive, worldwide, royalty-free copyright license to reproduce, prepare derivative works of, publicly display, publicly perform, distribute and sublicense the Contribution of such Contributor, if any, and such derivative works, in source code and object code form.
- b. Subject to the terms of this Agreement, each Contributor hereby grants Recipient a non-exclusive, worldwide, royalty-free patent license under Licensed Patents to make, use, sell, offer to sell, import and otherwise transfer the Contribution of such Contributor, if any, in source code and object code form. The patent license granted by a Contributor shall also apply to the combination of the Contribution of that

Contributor and the Program if, at the time the Contribution is added by the Contributor, such addition of the Contribution causes such combination to be covered by the Licensed Patents. The patent license granted by a Contributor shall not apply to (i) any other combinations which include the Contribution, nor to (ii) Contributions of other Contributors. No hardware per se is licensed hereunder.

- c. Recipient understands that although each Contributor grants the licenses to its Contributions set forth herein, no assurances are provided by any Contributor that the Program does not infringe the patent or other intellectual property rights of any other entity. Each Contributor disclaims any liability to Recipient for claims brought by any other entity based on infringement of intellectual property rights or otherwise. As a condition to exercising the rights and licenses granted hereunder, each Recipient hereby assumes sole responsibility to secure any other intellectual property rights needed, if any. For example, if a third party patent license is required to allow Recipient to distribute the Program, it is Recipient's responsibility to acquire that license before distributing the Program.
- d. Each Contributor represents that to its knowledge it has sufficient copyright rights in its Contribution, if any, to grant the copyright license set forth in this Agreement.

3. REQUIREMENTS

- A. Distributor may choose to distribute the Program in any form under this Agreement or under its own license agreement, provided that:
 - 1. it complies with the terms and conditions of this Agreement;
 - 2. if the Program is distributed in source code or other tangible form, a copy of this Agreement or Distributor's own license agreement is included with each copy of the Program; and
 - 3. if distributed under Distributor's own license agreement, such license agreement:
 - a. effectively disclaims on behalf of all Contributors all warranties and conditions, express and implied, including warranties or conditions of title and non-infringement, and implied warranties or conditions of merchantability and fitness for a particular purpose;
 - b. effectively excludes on behalf of all Contributors all liability for damages, including direct, indirect, special, incidental and consequential damages, such as lost profits; and
 - c. states that any provisions which differ from this Agreement are offered by that Contributor alone and not by any other party.
- B. Each Distributor must include the following in a conspicuous location in the Program:

Copyright (C) < YEAR>, < ORGANIZATION> and others. All Rights Reserved.

C. In addition, each Contributor must identify itself as the originator of its Contribution, if any, and indicate its consent to characterization of its additions and/or changes as a Contribution, in a manner that reasonably

allows subsequent Recipients to identify the originator of the Contribution. Once consent is granted, it may not thereafter be revoked.

4. COMMERCIAL DISTRIBUTION

Commercial distributors of software may accept certain responsibilities with respect to end users, business partners and the like. While this license is intended to facilitate the commercial use of the Program, the Distributor who includes the Program in a commercial product offering should do so in a manner which does not create potential liability for Contributors. Therefore, if a Distributor includes the Program in a commercial product offering, such Distributor ("Commercial Distributor") hereby agrees to defend and indemnify every Contributor ("Indemnified Contributor") against any losses, damages and costs (collectively "Losses") arising from claims, lawsuits and other legal actions brought by a third party against the Indemnified Contributor to the extent caused by the acts or omissions of such Commercial Distributor in connection with its distribution of the Program in a commercial product offering. The obligations in this section do not apply to any claims or Losses relating to any actual or alleged intellectual property infringement. In order to qualify, an Indemnified Contributor must: a) promptly notify the Commercial Distributor in writing of such claim, and b) allow the Commercial Distributor to control, and cooperate with the Commercial Distributor in, the defense and any related settlement negotiations. The Indemnified Contributor may participate in any such claim at its own expense.

For example, a Distributor might include the Program in a commercial product offering, Product X. That Distributor is then a Commercial Distributor. If that Commercial Distributor then makes performance claims, or offers warranties related to Product X, those performance claims and warranties are such Commercial Distributor's responsibility alone. Under this section, the Commercial Distributor would have to defend claims against the Contributors related to those performance claims and warranties, and if a court requires any Contributor to pay any damages as a result, the Commercial Distributor must pay those damages.

5. NO WARRANTY

EXCEPT AS EXPRESSLY SET FORTH IN THIS AGREEMENT, THE PROGRAM IS PROVIDED 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. Each Recipient is solely responsible for determining the appropriateness of using and distributing the Program and assumes all risks associated with its exercise of rights under this Agreement, including but not limited to the risks and costs of program errors, compliance with applicable laws, damage to or loss of data, programs or equipment, and unavailability or interruption of operations.

6. DISCLAIMER OF LIABILITY

EXCEPT AS EXPRESSLY SET FORTH IN THIS AGREEMENT, NEITHER RECIPIENT NOR ANY CONTRIBUTORS SHALL HAVE ANY LIABILITY FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING WITHOUT LIMITATION LOST PROFITS), 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 OR DISTRIBUTION OF THE PROGRAM OR THE EXERCISE OF ANY RIGHTS GRANTED HEREUNDER, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

7. GENERAL

If any provision of this Agreement is invalid or unenforceable under applicable law, it shall not affect the validity or enforceability of the remainder of the terms of this Agreement, and without further action by the parties hereto, such provision shall be reformed to the minimum extent necessary to make such provision valid and enforceable.

If Recipient institutes patent litigation against a Contributor with respect to a patent applicable to software (including a cross-claim or counterclaim in a lawsuit), then any patent licenses granted by that Contributor to such Recipient under this Agreement shall terminate as of the date such litigation is filed. In addition, if Recipient institutes patent litigation against any entity (including a cross-claim or counterclaim in a lawsuit) alleging that the Program itself (excluding combinations of the Program with other software or hardware) infringes such Recipient's patent(s), then such Recipient's rights granted under Section 2(b) shall terminate as of the date such litigation is filed.

All Recipient's rights under this Agreement shall terminate if it fails to comply with any of the material terms or conditions of this Agreement and does not cure such failure in a reasonable period of time after becoming aware of such noncompliance. If all Recipient's rights under this Agreement terminate, Recipient agrees to cease use and distribution of the Program as soon as reasonably practicable. However, Recipient's obligations under this Agreement and any licenses granted by Recipient relating to the Program shall continue and survive.

<OWNER> may publish new versions (including revisions) of this Agreement from time to time. Each new version of the Agreement will be given a distinguishing version number. The Program (including Contributions) may always be distributed subject to the version of the Agreement under which it was received. In addition, after a new version of the Agreement is published, Contributor may elect to distribute the Program (including its

Contributions) under the new version. No one other than *OWNER* has the right to modify this Agreement. Except as expressly stated in Sections 2(a) and 2(b) above, Recipient receives no rights or licenses to the intellectual property of any Contributor under this Agreement, whether expressly, by implication, estoppel or otherwise. All rights in the Program not expressly granted under this Agreement are reserved.

This Agreement is governed by the laws of the State of *STATE* and the intellectual property laws of the United States of America. No party to this Agreement will bring a legal action under this Agreement more than one year after the cause of action arose. Each party waives its rights to a jury trial in any resulting litigation.

Lucent Public License v1.02

Identifier: LPL-1.02

Lucent Public License Version 1.02

THE ACCOMPANYING PROGRAM IS PROVIDED UNDER THE TERMS OF THIS PUBLIC LICENSE ("AGREEMENT"). ANY USE, REPRODUCTION OR DISTRIBUTION OF THE PROGRAM CONSTITUTES RECIPIENT'S ACCEPTANCE OF THIS AGREEMENT.

1. DEFINITIONS

"Contribution" means:

- a. in the case of Lucent Technologies Inc. ("LUCENT"), the Original Program, and
- b. in the case of each Contributor,
 - i. changes to the Program, and
 - ii. additions to the Program;

where such changes and/or additions to the Program were added to the Program by such Contributor itself or anyone acting on such Contributor's behalf, and the Contributor explicitly consents, in accordance with Section 3C, to characterization of the changes and/or additions as Contributions.

"Contributor" means LUCENT and any other entity that has Contributed a Contribution to the Program.

"Distributor" means a Recipient that distributes the Program, modifications to the Program, or any part thereof.

"Licensed Patents" mean patent claims licensable by a Contributor which are necessarily infringed by the use or sale of its Contribution alone or when combined with the Program.

"Original Program" means the original version of the software accompanying this Agreement as released by LUCENT, including source code, object code and documentation, if any.

"Program" means the Original Program and Contributions or any part thereof

"Recipient" means anyone who receives the Program under this Agreement, including all Contributors.

2. GRANT OF RIGHTS

- a. Subject to the terms of this Agreement, each Contributor hereby grants Recipient a non-exclusive, worldwide, royalty-free copyright license to reproduce, prepare derivative works of, publicly display, publicly perform, distribute and sublicense the Contribution of such Contributor, if any, and such derivative works, in source code and object code form.
- b. Subject to the terms of this Agreement, each Contributor hereby grants Recipient a non-exclusive, worldwide, royalty-free patent license under Licensed Patents to make, use, sell, offer to sell, import and otherwise transfer the Contribution of such Contributor, if any, in source code and object code form. The patent license granted by a Contributor shall also apply to the combination of the Contributor of that Contributor and the Program if, at the time the Contribution is added by the Contributor, such addition of the Contribution causes such combination to be covered by the Licensed Patents. The patent license granted by a Contributor shall not apply to (i) any other combinations which include the Contribution, nor to (ii) Contributions of other Contributors. No hardware per se is licensed hereunder.
- c. Recipient understands that although each Contributor grants the licenses to its Contributions set forth herein, no assurances are provided by any Contributor that the Program does not infringe the patent or other intellectual property rights of any other entity. Each Contributor disclaims any liability to Recipient for claims brought by any other entity based on infringement of intellectual property rights or otherwise. As a condition to exercising the rights and licenses granted hereunder, each Recipient hereby assumes sole responsibility to secure any other intellectual property rights needed, if any. For example, if a third party patent license is required to allow Recipient to distribute the Program, it is Recipient's responsibility to acquire that license before distributing the Program.

d. Each Contributor represents that to its knowledge it has sufficient copyright rights in its Contribution, if any, to grant the copyright license set forth in this Agreement.

3. REQUIREMENTS

- A. Distributor may choose to distribute the Program in any form under this Agreement or under its own license agreement, provided that:
 - 1. it complies with the terms and conditions of this Agreement;
 - 2. if the Program is distributed in source code or other tangible form, a copy of this Agreement or Distributor's own license agreement is included with each copy of the Program; and
 - 3. if distributed under Distributor's own license agreement, such license agreement:
 - a. effectively disclaims on behalf of all Contributors all warranties and conditions, express and implied, including warranties or conditions of title and non-infringement, and implied warranties or conditions of merchantability and fitness for a particular purpose;
 - b. effectively excludes on behalf of all Contributors all liability for damages, including direct, indirect, special, incidental and consequential damages, such as lost profits; and
 - c. states that any provisions which differ from this Agreement are offered by that Contributor alone and not by any other party.
- B. Each Distributor must include the following in a conspicuous location in the Program:

Copyright (C) 2003, Lucent Technologies Inc. and others. All Rights Reserved.

C. In addition, each Contributor must identify itself as the originator of its Contribution in a manner that reasonably allows subsequent Recipients to identify the originator of the Contribution. Also, each Contributor must agree that the additions and/or changes are intended to be a Contribution. Once a Contribution is contributed, it may not thereafter be revoked.

4. COMMERCIAL DISTRIBUTION

Commercial distributors of software may accept certain responsibilities with respect to end users, business partners and the like. While this license is intended to facilitate the commercial use of the Program, the Distributor who includes the Program in a commercial product offering should do so in a manner which does not create potential liability for Contributors. Therefore, if a Distributor includes the Program in a commercial product offering, such Distributor ("Commercial Distributor") hereby agrees to defend and indemnify every Contributor ("Indemnified Contributor") against any losses, damages and costs (collectively "Losses") arising from claims, lawsuits and other legal actions brought by a third party against the Indemnified Contributor to the extent caused by the acts or omissions of such Commercial Distributor in connection with its distribution of the Program in a

commercial product offering. The obligations in this section do not apply to any claims or Losses relating to any actual or alleged intellectual property infringement. In order to qualify, an Indemnified Contributor must: a) promptly notify the Commercial Distributor in writing of such claim, and b) allow the Commercial Distributor to control, and cooperate with the Commercial Distributor in, the defense and any related settlement negotiations. The Indemnified Contributor may participate in any such claim at its own expense.

For example, a Distributor might include the Program in a commercial product offering, Product X. That Distributor is then a Commercial Distributor. If that Commercial Distributor then makes performance claims, or offers warranties related to Product X, those performance claims and warranties are such Commercial Distributor's responsibility alone. Under this section, the Commercial Distributor would have to defend claims against the Contributors related to those performance claims and warranties, and if a court requires any Contributor to pay any damages as a result, the Commercial Distributor must pay those damages.

5. NO WARRANTY

EXCEPT AS EXPRESSLY SET FORTH IN THIS AGREEMENT, THE PROGRAM IS PROVIDED 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. Each Recipient is solely responsible for determining the appropriateness of using and distributing the Program and assumes all risks associated with its exercise of rights under this Agreement, including but not limited to the risks and costs of program errors, compliance with applicable laws, damage to or loss of data, programs or equipment, and unavailability or interruption of operations.

6. DISCLAIMER OF LIABILITY

EXCEPT AS EXPRESSLY SET FORTH IN THIS AGREEMENT, NEITHER RECIPIENT NOR ANY CONTRIBUTORS SHALL HAVE ANY LIABILITY FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING WITHOUT LIMITATION LOST PROFITS), 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 OR DISTRIBUTION OF THE PROGRAM OR THE EXERCISE OF ANY RIGHTS GRANTED HEREUNDER, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

7. EXPORT CONTROL

Recipient agrees that Recipient alone is responsible for compliance with the United States export administration regulations (and the export control laws and regulation of any other countries).

8. GENERAL

If any provision of this Agreement is invalid or unenforceable under applicable law, it shall not affect the validity or enforceability of the remainder of the terms of this Agreement, and without further action by the parties hereto, such provision shall be reformed to the minimum extent necessary to make such provision valid and enforceable.

If Recipient institutes patent litigation against a Contributor with respect to a patent applicable to software (including a cross-claim or counterclaim in a lawsuit), then any patent licenses granted by that Contributor to such Recipient under this Agreement shall terminate as of the date such litigation is filed. In addition, if Recipient institutes patent litigation against any entity (including a cross-claim or counterclaim in a lawsuit) alleging that the Program itself (excluding combinations of the Program with other software or hardware) infringes such Recipient's patent(s), then such Recipient's rights granted under Section 2(b) shall terminate as of the date such litigation is filed.

All Recipient's rights under this Agreement shall terminate if it fails to comply with any of the material terms or conditions of this Agreement and does not cure such failure in a reasonable period of time after becoming aware of such noncompliance. If all Recipient's rights under this Agreement terminate, Recipient agrees to cease use and distribution of the Program as soon as reasonably practicable. However, Recipient's obligations under this Agreement and any licenses granted by Recipient relating to the Program shall continue and survive.

LUCENT may publish new versions (including revisions) of this Agreement from time to time. Each new version of the Agreement will be given a distinguishing version number. The Program (including Contributions) may always be distributed subject to the version of the Agreement under which it was received. In addition, after a new version of the Agreement is published, Contributor may elect to distribute the Program (including its Contributions) under the new version. No one other than LUCENT has the right to modify this Agreement. Except as expressly stated in Sections 2(a) and 2(b) above, Recipient receives no rights or licenses to the intellectual property of any Contributor under this Agreement, whether expressly, by implication, estoppel or otherwise. All rights in the Program not expressly granted under this Agreement are reserved.

This Agreement is governed by the laws of the State of New York and the intellectual property laws of the United States of America. No party to this Agreement will bring a legal action under this Agreement more than one year

after the cause of action arose. Each party waives its rights to a jury trial in any resulting litigation.

Python License 2.0.1

Identifier: Python-2.0.1

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 2.0.1 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 Python Software Foundation; All Rights Reserved" are retained in Python 2.0.1 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 2.0.1 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 2.0.1.
- 4. PSF is making Python 2.0.1 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 2.0.1 WILL NOT INFRINGE ANY THIRD PARTY RIGHTS.
- 5. PSF SHALL NOT BE LIABLE TO LICENSEE OR ANY OTHER USERS OF PYTHON 2.0.1 FOR ANY INCIDENTAL, SPECIAL, OR CONSEQUENTIAL DAMAGES OR LOSS AS A RESULT OF MODIFYING, DISTRIBUTING, OR OTHERWISE USING PYTHON 2.0.1, 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. 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 2.0.1, 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.

- 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 © 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.

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.

GNU Lesser General Public License v2.1 only

Identifier: LGPL-2.1-only

GNU LESSER GENERAL PUBLIC LICENSE

Version 2.1, February 1999

Copyright (C) 1991, 1999 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.

[This is the first released version of the Lesser GPL. It also counts as the successor of the GNU Library Public License, version 2, hence the version number 2.1.]

Preamble

The licenses for most software are designed to take away your freedom to share and change it. By contrast, the GNU General Public Licenses are intended to guarantee your freedom to share and change free software--to make sure the software is free for all its users.

This license, the Lesser General Public License, applies to some specially designated software packages--typically libraries--of the Free Software Foundation and other authors who decide to use it. You can use it too, but we suggest you first think carefully about whether this license or the ordinary General Public License is the better strategy to use in any particular case, based on the explanations below.

When we speak of free software, we are referring to freedom of use, 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 and use pieces of it in new free programs; and that you are informed that you can do these things.

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

For example, if you distribute copies of the library, whether gratis or for a fee, you must give the recipients all the rights that we gave you. You must make sure that they, too, receive or can get the source code. If you link other code with the library, you must provide complete object files to the recipients, so that they can relink them with the library after making changes to the library and recompiling it. And you must show them these terms so they know their rights.

We protect your rights with a two-step method: (1) we copyright the library, and (2) we offer you this license, which gives you legal permission to copy, distribute and/or modify the library.

To protect each distributor, we want to make it very clear that there is no warranty for the free library. Also, if the library is modified by someone else and passed on, the recipients should know that what they have is not the original version, so that the original author's reputation will not be affected by problems that might be introduced by others.

Finally, software patents pose a constant threat to the existence of any free program. We wish to make sure that a company cannot effectively restrict the users of a free program by obtaining a restrictive license from a patent holder. Therefore, we insist that any patent license obtained for a version of the library must be consistent with the full freedom of use specified in this license.

Most GNU software, including some libraries, is covered by the ordinary GNU General Public License. This license, the GNU Lesser General Public License, applies to certain designated libraries, and is quite different from the ordinary General Public License. We use this license for certain libraries in order to permit linking those libraries into non-free programs.

When a program is linked with a library, whether statically or using a shared library, the combination of the two is legally speaking a combined work, a derivative of the original library. The ordinary General Public License therefore permits such linking only if the entire combination fits its criteria of freedom. The Lesser General Public License permits more lax criteria for linking other code with the library.

We call this license the "Lesser" General Public License because it does Less to protect the user's freedom than the ordinary General Public License. It also provides other free software developers Less of an advantage over competing non-free programs. These disadvantages are the reason we use the ordinary General Public License for many libraries. However, the Lesser license provides advantages in certain special circumstances.

For example, on rare occasions, there may be a special need to encourage the widest possible use of a certain library, so that it becomes a de-facto standard. To achieve this, non-free programs must be allowed to use the library. A more frequent case is that a free library does the same job as widely used non-free libraries. In this case, there is little to gain by limiting the free library to free software only, so we use the Lesser General Public License.

In other cases, permission to use a particular library in non-free programs enables a greater number of people to use a large body of free software. For example, permission to use the GNU C Library in non-free programs enables many more people to use the whole GNU operating system, as well as its variant, the GNU/Linux operating system.

Although the Lesser General Public License is Less protective of the users' freedom, it does ensure that the user of a program that is linked with the Library has the freedom and the wherewithal to run that program using a modified

version of the Library.

The precise terms and conditions for copying, distribution and modification follow. Pay close attention to the difference between a "work based on the library" and a "work that uses the library". The former contains code derived from the library, whereas the latter must be combined with the library in order to run.

GNU LESSER GENERAL PUBLIC LICENSE

TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

0. This License Agreement applies to any software library or other program which contains a notice placed by the copyright holder or other authorized party saying it may be distributed under the terms of this Lesser General Public License (also called "this License"). Each licensee is addressed as "you".

A "library" means a collection of software functions and/or data prepared so as to be conveniently linked with application programs (which use some of those functions and data) to form executables.

The "Library", below, refers to any such software library or work which has been distributed under these terms. A "work based on the Library" means either the Library or any derivative work under copyright law: that is to say, a work containing the Library or a portion of it, either verbatim or with modifications and/or translated straightforwardly into another language. (Hereinafter, translation is included without limitation in the term "modification".)

"Source code" for a work means the preferred form of the work for making modifications to it. For a library, 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 library.

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running a program using the Library is not restricted, and output from such a program is covered only if its contents constitute a work based on the Library (independent of the use of the Library in a tool for writing it). Whether that is true depends on what the Library does and what the program that uses the Library does.

1. You may copy and distribute verbatim copies of the Library's complete 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 distribute a copy of this License along with the Library.

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 Library or any portion of it, thus forming a work based on the Library, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:
 - a) The modified work must itself be a software library.
 - b) You must cause the files modified to carry prominent notices stating that you changed the files and the date of any change.
 - c) You must cause the whole of the work to be licensed at no charge to all third parties under the terms of this License.
 - d) If a facility in the modified Library refers to a function or a table of data to be supplied by an application program that uses the facility, other than as an argument passed when the facility is invoked, then you must make a good faith effort to ensure that, in the event an application does not supply such function or table, the facility still operates, and performs whatever part of its purpose remains meaningful.

(For example, a function in a library to compute square roots has a purpose that is entirely well-defined independent of the application. Therefore, Subsection 2d requires that any application-supplied function or table used by this function must be optional: if the application does not supply it, the square root function must still compute square roots.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Library, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Library, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

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 Library.

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

3. You may opt to apply the terms of the ordinary GNU General Public License instead of this License to a given copy of the Library. To do this, you must alter all the notices that refer to this License, so that they refer to the ordinary GNU General Public License, version 2, instead of to this License. (If a newer version than version 2 of the ordinary GNU General Public License has appeared, then you can specify that version instead if you wish.) Do not make any other change in these notices.

Once this change is made in a given copy, it is irreversible for that copy, so the ordinary GNU General Public License applies to all subsequent copies and derivative works made from that copy.

This option is useful when you wish to copy part of the code of the Library into a program that is not a library.

4. You may copy and distribute the Library (or a portion or derivative of it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you 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.

If distribution of 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 satisfies the requirement to distribute the source code, even though third parties are not compelled to copy the source along with the object code.

5. A program that contains no derivative of any portion of the Library, but is designed to work with the Library by being compiled or linked with it, is called a "work that uses the Library". Such a work, in isolation, is not a derivative work of the Library, and therefore falls outside the scope of this License.

However, linking a "work that uses the Library" with the Library creates an executable that is a derivative of the Library (because it contains portions of the Library), rather than a "work that uses the library". The executable is therefore covered by this License. Section 6 states terms for distribution of such executables.

When a "work that uses the Library" uses material from a header file that is part of the Library, the object code for the work may be a derivative work of the Library even though the source code is not. Whether this is true is especially significant if the work can be linked without the Library, or if the work is itself a library. The threshold for this to be true is not precisely defined by law.

If such an object file uses only numerical parameters, data structure layouts and accessors, and small macros and small inline functions (ten lines or less in length), then the use of the object file is unrestricted, regardless of whether it is legally a derivative work. (Executables containing this object code plus portions of the Library will still fall under Section 6.)

Otherwise, if the work is a derivative of the Library, you may distribute the object code for the work under the terms of Section 6. Any executables containing that work also fall under Section 6, whether or not they are linked directly with the Library itself.

6. As an exception to the Sections above, you may also combine or link a "work that uses the Library" with the Library to produce a work containing portions of the Library, and distribute that work under terms of your choice, provided that the terms permit modification of the work for the customer's own use and reverse engineering for debugging such modifications.

You must give prominent notice with each copy of the work that the Library is used in it and that the Library and its use are covered by this License. You must supply a copy of this License. If the work during execution displays copyright notices, you must include the copyright notice for the Library among them, as well as a reference directing the user to the copy of this License. Also, you must do one of these things:

- a) Accompany the work with the complete corresponding machine-readable source code for the Library including whatever changes were used in the work (which must be distributed under Sections 1 and 2 above); and, if the work is an executable linked with the Library, with the complete machine-readable "work that uses the Library", as object code and/or source code, so that the user can modify the Library and then relink to produce a modified executable containing the modified Library. (It is understood that the user who changes the contents of definitions files in the Library will not necessarily be able to recompile the application to use the modified definitions.)
- b) Use a suitable shared library mechanism for linking with the Library. A suitable mechanism is one that (1) uses at run time a copy of the library already present on the user's computer system, rather than copying library functions into the executable, and (2) will operate properly with a modified version of the library, if the user installs one, as long as the modified version is interface-compatible with the version that the work was made with.
- c) Accompany the work with a written offer, valid for at least three years, to give the same user the materials specified in Subsection 6a, above, for a charge no more than the cost of performing this distribution.

- d) If distribution of the work is made by offering access to copy from a designated place, offer equivalent access to copy the above specified materials from the same place.
- e) Verify that the user has already received a copy of these materials or that you have already sent this user a copy.

For an executable, the required form of the "work that uses the Library" must include any data and utility programs needed for reproducing the executable from it. However, as a special exception, the materials to be distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

It may happen that this requirement contradicts the license restrictions of other proprietary libraries that do not normally accompany the operating system. Such a contradiction means you cannot use both them and the Library together in an executable that you distribute.

- 7. You may place library facilities that are a work based on the Library side-by-side in a single library together with other library facilities not covered by this License, and distribute such a combined library, provided that the separate distribution of the work based on the Library and of the other library facilities is otherwise permitted, and provided that you do these two things:
 - a) Accompany the combined library with a copy of the same work based on the Library, uncombined with any other library facilities. This must be distributed under the terms of the Sections above.
 - b) Give prominent notice with the combined library of the fact that part of it is a work based on the Library, and explaining where to find the accompanying uncombined form of the same work.
- 8. You may not copy, modify, sublicense, link with, or distribute the Library except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense, link with, or distribute the Library 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.
- 9. 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 Library or its derivative works. These actions are prohibited by law if you do not accept this License. Therefore, by modifying or distributing the Library (or any work based on the Library), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Library or works based on it.
- 10. Each time you redistribute the Library (or any work based on the Library), the recipient automatically receives a license from the original licensor to copy, distribute, link with or modify the Library 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 with this License.

11. 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 Library at all. For example, if a patent license would not permit royalty-free redistribution of the Library 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 Library.

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.

- 12. If the distribution and/or use of the Library is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Library 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.
- 13. The Free Software Foundation may publish revised and/or new versions of the Lesser 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 Library 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 Library does not specify a license version number, you may choose any version ever published by the Free Software Foundation. 14. If you wish to incorporate parts of the Library into other free programs whose distribution conditions are incompatible with these, 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

15. BECAUSE THE LIBRARY IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE LIBRARY, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE LIBRARY "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 LIBRARY IS WITH YOU. SHOULD THE LIBRARY PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

16. 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 LIBRARY 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 LIBRARY (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 LIBRARY TO OPERATE WITH ANY OTHER SOFTWARE), 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 Libraries

If you develop a new library, and you want it to be of the greatest possible use to the public, we recommend making it free software that everyone can redistribute and change. You can do so by permitting redistribution under these terms (or, alternatively, under the terms of the ordinary General Public License).

To apply these terms, attach the following notices to the library. 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 library's name and an idea of what it does. >
Copyright (C) <year > <name of author >

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.

This library 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 Lesser General Public License for more details.

You should have received a copy of the GNU Lesser General Public License along with this library; 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.

You should also get your employer (if you work as a programmer) or your school, if any, to sign a "copyright disclaimer" for the library, if necessary. Here is a sample; alter the names:

Yoyodyne, Inc., hereby disclaims all copyright interest in the library `Frob' (a library for tweaking knobs) written by James Random Hacker.

<signature of Ty Coon >, 1 April 1990
Ty Coon, President of Vice
That's all there is to it!

Eclipse Public License 1.0

Identifier: EPL-1.0

Eclipse Public License - v 1.0

THE ACCOMPANYING PROGRAM IS PROVIDED UNDER THE TERMS OF THIS ECLIPSE PUBLIC LICENSE ("AGREEMENT"). ANY USE, REPRODUCTION OR DISTRIBUTION OF THE PROGRAM CONSTITUTES RECIPIENT'S ACCEPTANCE OF THIS AGREEMENT.

1. DEFINITIONS

"Contribution" means:

- a) in the case of the initial Contributor, the initial code and documentation distributed under this Agreement, and
- b) in the case of each subsequent Contributor:
 - i) changes to the Program, and
 - ii) additions to the Program;

where such changes and/or additions to the Program originate from and are distributed by that particular Contributor. A Contribution 'originates' from a Contributor if it was added to the Program by such Contributor itself or anyone acting on such Contributor's behalf. Contributions do not include additions to the Program which: (i) are separate modules of software distributed in conjunction with the Program under their own license agreement, and (ii) are not derivative works of the Program.

"Contributor" means any person or entity that distributes the Program.

"Licensed Patents" mean patent claims licensable by a Contributor which are necessarily infringed by the use or sale of its Contribution alone or when combined with the Program.

"Program" means the Contributions distributed in accordance with this Agreement.

"Recipient" means anyone who receives the Program under this Agreement, including all Contributors.

2. GRANT OF RIGHTS

a) Subject to the terms of this Agreement, each Contributor hereby grants Recipient a non-exclusive, worldwide, royalty-free copyright license to reproduce, prepare derivative works of, publicly display, publicly perform, distribute and sublicense the Contribution of such Contributor, if any, and such derivative works, in source code and object code form.

- b) Subject to the terms of this Agreement, each Contributor hereby grants Recipient a non-exclusive, worldwide, royalty-free patent license under Licensed Patents to make, use, sell, offer to sell, import and otherwise transfer the Contribution of such Contributor, if any, in source code and object code form. This patent license shall apply to the combination of the Contribution and the Program if, at the time the Contribution is added by the Contributor, such addition of the Contribution causes such combination to be covered by the Licensed Patents. The patent license shall not apply to any other combinations which include the Contribution. No hardware per se is licensed hereunder.
- c) Recipient understands that although each Contributor grants the licenses to its Contributions set forth herein, no assurances are provided by any Contributor that the Program does not infringe the patent or other intellectual property rights of any other entity. Each Contributor disclaims any liability to Recipient for claims brought by any other entity based on infringement of intellectual property rights or otherwise. As a condition to exercising the rights and licenses granted hereunder, each Recipient hereby assumes sole responsibility to secure any other intellectual property rights needed, if any. For example, if a third party patent license is required to allow Recipient to distribute the Program, it is Recipient's responsibility to acquire that license before distributing the Program.
- d) Each Contributor represents that to its knowledge it has sufficient copyright rights in its Contribution, if any, to grant the copyright license set forth in this Agreement.

3. REQUIREMENTS

A Contributor may choose to distribute the Program in object code form under its own license agreement, provided that:

- a) it complies with the terms and conditions of this Agreement; and
- b) its license agreement:
 - *i)* effectively disclaims on behalf of all Contributors all warranties and conditions, express and implied, including warranties or conditions of title and non-infringement, and implied warranties or conditions of merchantability and fitness for a particular purpose;
 - *ii)* effectively excludes on behalf of all Contributors all liability for damages, including direct, indirect, special, incidental and consequential damages, such as lost profits;
 - iii) states that any provisions which differ from this Agreement are offered by that Contributor alone and not by any other party; and
 - *iv*) states that source code for the Program is available from such Contributor, and informs licensees how to obtain it in a reasonable manner on or through a medium customarily used for software exchange.

When the Program is made available in source code form:

- a) it must be made available under this Agreement; and
- b) a copy of this Agreement must be included with each copy of the Program. Contributors may not remove or alter any copyright notices contained within the Program.

Each Contributor must identify itself as the originator of its Contribution, if any, in a manner that reasonably allows subsequent Recipients to identify the originator of the Contribution.

4. COMMERCIAL DISTRIBUTION

Commercial distributors of software may accept certain responsibilities with respect to end users, business partners and the like. While this license is intended to facilitate the commercial use of the Program, the Contributor who includes the Program in a commercial product offering should do so in a manner which does not create potential liability for other Contributors. Therefore, if a Contributor includes the Program in a commercial product offering, such Contributor ("Commercial Contributor") hereby agrees to defend and indemnify every other Contributor ("Indemnified Contributor") against any losses, damages and costs (collectively "Losses") arising from claims, lawsuits and other legal actions brought by a third party against the Indemnified Contributor to the extent caused by the acts or omissions of such Commercial Contributor in connection with its distribution of the Program in a commercial product offering. The obligations in this section do not apply to any claims or Losses relating to any actual or alleged intellectual property infringement. In order to qualify, an Indemnified Contributor must: a) promptly notify the Commercial Contributor in writing of such claim, and b) allow the Commercial Contributor to control, and cooperate with the Commercial Contributor in, the defense and any related settlement negotiations. The Indemnified Contributor may participate in any such claim at its own expense.

For example, a Contributor might include the Program in a commercial product offering, Product X. That Contributor is then a Commercial Contributor. If that Commercial Contributor then makes performance claims, or offers warranties related to Product X, those performance claims and warranties are such Commercial Contributor's responsibility alone. Under this section, the Commercial Contributor would have to defend claims against the other Contributors related to those performance claims and warranties, and if a court requires any other Contributor to pay any damages as a result, the Commercial Contributor must pay those damages.

5. NO WARRANTY

EXCEPT AS EXPRESSLY SET FORTH IN THIS AGREEMENT, THE PROGRAM IS PROVIDED 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. Each Recipient is solely responsible for determining the appropriateness of using and distributing the Program and assumes all risks associated with its exercise of rights under this Agreement,

including but not limited to the risks and costs of program errors, compliance with applicable laws, damage to or loss of data, programs or equipment, and unavailability or interruption of operations.

6. DISCLAIMER OF LIABILITY

EXCEPT AS EXPRESSLY SET FORTH IN THIS AGREEMENT, NEITHER RECIPIENT NOR ANY CONTRIBUTORS SHALL HAVE ANY LIABILITY FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING WITHOUT LIMITATION LOST PROFITS), 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 OR DISTRIBUTION OF THE PROGRAM OR THE EXERCISE OF ANY RIGHTS GRANTED HEREUNDER, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

7. GENERAL

If any provision of this Agreement is invalid or unenforceable under applicable law, it shall not affect the validity or enforceability of the remainder of the terms of this Agreement, and without further action by the parties hereto, such provision shall be reformed to the minimum extent necessary to make such provision valid and enforceable.

If Recipient institutes patent litigation against any entity (including a cross-claim or counterclaim in a lawsuit) alleging that the Program itself (excluding combinations of the Program with other software or hardware) infringes such Recipient's patent(s), then such Recipient's rights granted under Section 2(b) shall terminate as of the date such litigation is filed.

All Recipient's rights under this Agreement shall terminate if it fails to comply with any of the material terms or conditions of this Agreement and does not cure such failure in a reasonable period of time after becoming aware of such noncompliance. If all Recipient's rights under this Agreement terminate, Recipient agrees to cease use and distribution of the Program as soon as reasonably practicable. However, Recipient's obligations under this Agreement and any licenses granted by Recipient relating to the Program shall continue and survive.

Everyone is permitted to copy and distribute copies of this Agreement, but in order to avoid inconsistency the Agreement is copyrighted and may only be modified in the following manner. The Agreement Steward reserves the right to publish new versions (including revisions) of this Agreement from time to time. No one other than the Agreement Steward has the right to modify this Agreement. The Eclipse Foundation is the initial Agreement Steward. The Eclipse Foundation may assign the responsibility to serve as the Agreement Steward to a suitable separate entity. Each new version of the Agreement will be given a distinguishing version number. The Program (including Contributions) may always be distributed subject to the version of the Agreement under which it was

received. In addition, after a new version of the Agreement is published, Contributor may elect to distribute the Program (including its Contributions) under the new version. Except as expressly stated in Sections 2(a) and 2(b) above, Recipient receives no rights or licenses to the intellectual property of any Contributor under this Agreement, whether expressly, by implication, estoppel or otherwise. All rights in the Program not expressly granted under this Agreement are reserved.

This Agreement is governed by the laws of the State of New York and the intellectual property laws of the United States of America. No party to this Agreement will bring a legal action under this Agreement more than one year after the cause of action arose. Each party waives its rights to a jury trial in any resulting litigation.

Apache License 1.1

Identifier: Apache-1.1

The Apache Software License, Version 1.1

Copyright (c) 2000 The Apache Software Foundation. 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. The end-user documentation included with the redistribution, if any, must include the following acknowledgment:
- "This product includes software developed by the Apache Software Foundation (http://www.apache.org/)." Alternately, this acknowledgment may appear in the software itself, if and wherever such third-party acknowledgments normally appear.
- 4. The name "Apache" and "Apache Software Foundation" must not be used to endorse or promote products derived from this software without prior written permission. For written permission, please contact apache@apache.org.

5. Products derived from this software may not be called "Apache" nor may "Apache" [ex. the names] appear in their name, without prior written permission of the Apache Software Foundation.

THIS SOFTWARE IS PROVIDED ``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 APACHE SOFTWARE FOUNDATION 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 software consists of voluntary contributions made by many individuals on behalf of the Apache Software Foundation. For more information on the Apache Software Foundation, please see http://www.apache.org/. Portions of this software are based upon public domain software originally written at the National Center for Supercomputing Applications, University of Illinois, Urbana-Champaign.

Common Development and Distribution License 1.0

Identifier: CDDL-1.0

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 recipient's 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.

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, MERCHANTABLE, FIT FOR A PARTICULAR PURPOSE OR NON-INFRINGING. 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 jurisdiction's 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.

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.

GNU Lesser General Public License v3.0 or later

Identifier: LGPL-3.0-or-later

GNU LESSER GENERAL PUBLIC LICENSE Version 3, 29 June 2007

Copyright (C) 2007 Free Software Foundation, Inc. https://fsf.org/

Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed.

This version of the GNU Lesser General Public License incorporates the terms and conditions of version 3 of the GNU General Public License, supplemented by the additional permissions listed below.

0. Additional Definitions.

As used herein, "this License" refers to version 3 of the GNU Lesser General Public License, and the "GNU GPL" refers to version 3 of the GNU General Public License.

"The Library" refers to a covered work governed by this License, other than an Application or a Combined Work as defined below.

An "Application" is any work that makes use of an interface provided by the Library, but which is not otherwise based on the Library. Defining a subclass of a class defined by the Library is deemed a mode of using an interface provided by the Library.

A "Combined Work" is a work produced by combining or linking an Application with the Library. The particular version of the Library with which the Combined Work was made is also called the "Linked Version".

The "Minimal Corresponding Source" for a Combined Work means the Corresponding Source for the Combined Work, excluding any source code for portions of the Combined Work that, considered in isolation, are based on the Application, and not on the Linked Version.

The "Corresponding Application Code" for a Combined Work means the object code and/or source code for the Application, including any data and utility programs needed for reproducing the Combined Work from the Application, but excluding the System Libraries of the Combined Work.

1. Exception to Section 3 of the GNU GPL.

You may convey a covered work under sections 3 and 4 of this License without being bound by section 3 of the GNU GPL.

2. Conveying Modified Versions.

If you modify a copy of the Library, and, in your modifications, a facility refers to a function or data to be supplied by an Application that uses the facility (other than as an argument passed when the facility is invoked), then you may convey a copy of the modified version:

- a) under this License, provided that you make a good faith effort to ensure that, in the event an Application does not supply the function or data, the facility still operates, and performs whatever part of its purpose remains meaningful, or
- b) under the GNU GPL, with none of the additional permissions of this License applicable to that copy.
- 3. Object Code Incorporating Material from Library Header Files.

The object code form of an Application may incorporate material from a header file that is part of the Library. You may convey such object code under terms of your choice, provided that, if the incorporated material is not

limited to numerical parameters, data structure layouts and accessors, or small macros, inline functions and templates (ten or fewer lines in length), you do both of the following:

- a) Give prominent notice with each copy of the object code that the Library is used in it and that the Library and its use are covered by this License.
- b) Accompany the object code with a copy of the GNU GPL and this license document.

4. Combined Works.

You may convey a Combined Work under terms of your choice that, taken together, effectively do not restrict modification of the portions of the Library contained in the Combined Work and reverse engineering for debugging such modifications, if you also do each of the following:

- a) Give prominent notice with each copy of the Combined Work that the Library is used in it and that the Library and its use are covered by this License.
- b) Accompany the Combined Work with a copy of the GNU GPL and this license document.
- c) For a Combined Work that displays copyright notices during execution, include the copyright notice for the Library among these notices, as well as a reference directing the user to the copies of the GNU GPL and this license document.
- d) Do one of the following:
 - 0) Convey the Minimal Corresponding Source under the terms of this License, and the Corresponding Application Code in a form suitable for, and under terms that permit, the user to recombine or relink the Application with a modified version of the Linked Version to produce a modified Combined Work, in the manner specified by section 6 of the GNU GPL for conveying Corresponding Source.
 - 1) Use a suitable shared library mechanism for linking with the Library. A suitable mechanism is one that (a) uses at run time a copy of the Library already present on the user's computer system, and (b) will operate properly with a modified version of the Library that is interface-compatible with the Linked Version.
- e) Provide Installation Information, but only if you would otherwise be required to provide such information under section 6 of the GNU GPL, and only to the extent that such information is necessary to install and execute a modified version of the Combined Work produced by recombining or relinking the Application with a modified version of the Linked Version. (If you use option 4d0, the Installation Information must accompany the Minimal Corresponding Source and Corresponding Application Code. If you use option 4d1, you must provide the Installation Information in the manner specified by section 6 of the GNU GPL for conveying Corresponding Source.)

5. Combined Libraries.

You may place library facilities that are a work based on the Library side by side in a single library together with

other library facilities that are not Applications and are not covered by this License, and convey such a combined library under terms of your choice, if you do both of the following:

- a) Accompany the combined library with a copy of the same work based on the Library, uncombined with any other library facilities, conveyed under the terms of this License.
- b) Give prominent notice with the combined library that part of it is a work based on the Library, and explaining where to find the accompanying uncombined form of the same work.
- 6. Revised Versions of the GNU Lesser General Public License.

The Free Software Foundation may publish revised and/or new versions of the GNU Lesser 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 Library as you received it specifies that a certain numbered version of the GNU Lesser General Public License "or any later version" applies to it, you have the option of following the terms and conditions either of that published version or of any later version published by the Free Software Foundation. If the Library as you received it does not specify a version number of the GNU Lesser General Public License, you may choose any version of the GNU Lesser General Public License ever published by the Free Software Foundation.

If the Library as you received it specifies that a proxy can decide whether future versions of the GNU Lesser General Public License shall apply, that proxy's public statement of acceptance of any version is permanent authorization for you to choose that version for the Library.

GNU GENERAL PUBLIC LICENSE Version 3, 29 June 2007

Copyright © 2007 Free Software Foundation, Inc. https://fsf.org/

Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed.

Preamble

The GNU General Public License is a free, copyleft license for software and other kinds of works.

The licenses for most software and other practical works are designed to take away your freedom to share and change the works. By contrast, the GNU General Public License is intended to guarantee your freedom to share and change all versions of a program--to make sure it remains free software for all its users. We, the Free Software Foundation, use the GNU General Public License for most of our software; it applies also to any other work released this way by its authors. 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 them 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 prevent others from denying you these rights or asking you to surrender the rights. Therefore, you have certain responsibilities if you distribute copies of the software, or if you modify it: responsibilities to respect the freedom of others.

For example, if you distribute copies of such a program, whether gratis or for a fee, you must pass on to the recipients the same freedoms that you received. 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.

Developers that use the GNU GPL protect your rights with two steps: (1) assert copyright on the software, and (2) offer you this License giving you legal permission to copy, distribute and/or modify it.

For the developers' and authors' protection, the GPL clearly explains that there is no warranty for this free software. For both users' and authors' sake, the GPL requires that modified versions be marked as changed, so that their problems will not be attributed erroneously to authors of previous versions.

Some devices are designed to deny users access to install or run modified versions of the software inside them, although the manufacturer can do so. This is fundamentally incompatible with the aim of protecting users' freedom to change the software. The systematic pattern of such abuse occurs in the area of products for individuals to use, which is precisely where it is most unacceptable. Therefore, we have designed this version of the GPL to prohibit the practice for those products. If such problems arise substantially in other domains, we stand ready to extend this provision to those domains in future versions of the GPL, as needed to protect the freedom of users.

Finally, every program is threatened constantly by software patents. States should not allow patents to restrict development and use of software on general-purpose computers, but in those that do, we wish to avoid the special

danger that patents applied to a free program could make it effectively proprietary. To prevent this, the GPL assures that patents cannot be used to render the program non-free.

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

TERMS AND CONDITIONS

0. Definitions.

"This License" refers to version 3 of the GNU General Public License.

"Copyright" also means copyright-like laws that apply to other kinds of works, such as semiconductor masks.

"The Program" refers to any copyrightable work licensed under this License. Each licensee is addressed as "you". "Licensees" and "recipients" may be individuals or organizations.

To "modify" a work means to copy from or adapt all or part of the work in a fashion requiring copyright permission, other than the making of an exact copy. The resulting work is called a "modified version" of the earlier work or a work "based on" the earlier work.

A "covered work" means either the unmodified Program or a work based on the Program.

To "propagate" a work means to do anything with it that, without permission, would make you directly or secondarily liable for infringement under applicable copyright law, except executing it on a computer or modifying a private copy. Propagation includes copying, distribution (with or without modification), making available to the public, and in some countries other activities as well.

To "convey" a work means any kind of propagation that enables other parties to make or receive copies. Mere interaction with a user through a computer network, with no transfer of a copy, is not conveying.

An interactive user interface displays "Appropriate Legal Notices" to the extent that it includes a convenient and prominently visible feature that (1) displays an appropriate copyright notice, and (2) tells the user that there is no warranty for the work (except to the extent that warranties are provided), that licensees may convey the work under this License, and how to view a copy of this License. If the interface presents a list of user commands or options, such as a menu, a prominent item in the list meets this criterion.

1. Source Code.

The "source code" for a work means the preferred form of the work for making modifications to it. "Object code" means any non-source form of a work.

A "Standard Interface" means an interface that either is an official standard defined by a recognized standards body, or, in the case of interfaces specified for a particular programming language, one that is widely used among developers working in that language.

The "System Libraries" of an executable work include anything, other than the work as a whole, that (a) is included in the normal form of packaging a Major Component, but which is not part of that Major Component, and (b) serves only to enable use of the work with that Major Component, or to implement a Standard Interface for which an implementation is available to the public in source code form. A "Major Component", in this context, means a major essential component (kernel, window system, and so on) of the specific operating system (if any) on which the executable work runs, or a compiler used to produce the work, or an object code interpreter used to run it.

The "Corresponding Source" for a work in object code form means all the source code needed to generate, install, and (for an executable work) run the object code and to modify the work, including scripts to control those activities. However, it does not include the work's System Libraries, or general-purpose tools or generally available free programs which are used unmodified in performing those activities but which are not part of the work. For example, Corresponding Source includes interface definition files associated with source files for the work, and the source code for shared libraries and dynamically linked subprograms that the work is specifically designed to require, such as by intimate data communication or control flow between those subprograms and other parts of the work.

The Corresponding Source need not include anything that users can regenerate automatically from other parts of the Corresponding Source.

The Corresponding Source for a work in source code form is that same work.

2. Basic Permissions.

All rights granted under this License are granted for the term of copyright on the Program, and are irrevocable provided the stated conditions are met. This License explicitly affirms your unlimited permission to run the unmodified Program. The output from running a covered work is covered by this License only if the output, given

its content, constitutes a covered work. This License acknowledges your rights of fair use or other equivalent, as provided by copyright law.

You may make, run and propagate covered works that you do not convey, without conditions so long as your license otherwise remains in force. You may convey covered works to others for the sole purpose of having them make modifications exclusively for you, or provide you with facilities for running those works, provided that you comply with the terms of this License in conveying all material for which you do not control copyright. Those thus making or running the covered works for you must do so exclusively on your behalf, under your direction and control, on terms that prohibit them from making any copies of your copyrighted material outside their relationship with you.

Conveying under any other circumstances is permitted solely under the conditions stated below. Sublicensing is not allowed; section 10 makes it unnecessary.

3. Protecting Users' Legal Rights From Anti-Circumvention Law.

No covered work shall be deemed part of an effective technological measure under any applicable law fulfilling obligations under article 11 of the WIPO copyright treaty adopted on 20 December 1996, or similar laws prohibiting or restricting circumvention of such measures.

When you convey a covered work, you waive any legal power to forbid circumvention of technological measures to the extent such circumvention is effected by exercising rights under this License with respect to the covered work, and you disclaim any intention to limit operation or modification of the work as a means of enforcing, against the work's users, your or third parties' legal rights to forbid circumvention of technological measures.

4. Conveying Verbatim Copies.

You may convey 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; keep intact all notices stating that this License and any non-permissive terms added in accord with section 7 apply to the code; keep intact all notices of the absence of any warranty; and give all recipients a copy of this License along with the Program.

You may charge any price or no price for each copy that you convey, and you may offer support or warranty protection for a fee.

5. Conveying Modified Source Versions.

You may convey a work based on the Program, or the modifications to produce it from the Program, in the form of source code under the terms of section 4, provided that you also meet all of these conditions:

- a) The work must carry prominent notices stating that you modified it, and giving a relevant date.
- b) The work must carry prominent notices stating that it is released under this License and any conditions added under section 7. This requirement modifies the requirement in section 4 to "keep intact all notices".
- c) You must license the entire work, as a whole, under this License to anyone who comes into possession of a copy. This License will therefore apply, along with any applicable section 7 additional terms, to the whole of the work, and all its parts, regardless of how they are packaged. This License gives no permission to license the work in any other way, but it does not invalidate such permission if you have separately received it.
- d) If the work has interactive user interfaces, each must display Appropriate Legal Notices; however, if the Program has interactive interfaces that do not display Appropriate Legal Notices, your work need not make them do so.

A compilation of a covered work with other separate and independent works, which are not by their nature extensions of the covered work, and which are not combined with it such as to form a larger program, in or on a volume of a storage or distribution medium, is called an "aggregate" if the compilation and its resulting copyright are not used to limit the access or legal rights of the compilation's users beyond what the individual works permit. Inclusion of a covered work in an aggregate does not cause this License to apply to the other parts of the aggregate.

6. Conveying Non-Source Forms.

You may convey a covered work in object code form under the terms of sections 4 and 5, provided that you also convey the machine-readable Corresponding Source under the terms of this License, in one of these ways:

- a) Convey the object code in, or embodied in, a physical product (including a physical distribution medium), accompanied by the Corresponding Source fixed on a durable physical medium customarily used for software interchange.
- b) Convey the object code in, or embodied in, a physical product (including a physical distribution medium), accompanied by a written offer, valid for at least three years and valid for as long as you offer spare parts or customer support for that product model, to give anyone who possesses the object code either (1) a copy of the Corresponding Source for all the software in the product that is covered by this License, on a durable physical medium customarily used for software interchange, for a price no more than your reasonable cost

of physically performing this conveying of source, or (2) access to copy the Corresponding Source from a network server at no charge.

- c) Convey individual copies of the object code with a copy of the written offer to provide the Corresponding Source. This alternative is allowed only occasionally and noncommercially, and only if you received the object code with such an offer, in accord with subsection 6b.
- d) Convey the object code by offering access from a designated place (gratis or for a charge), and offer equivalent access to the Corresponding Source in the same way through the same place at no further charge. You need not require recipients to copy the Corresponding Source along with the object code. If the place to copy the object code is a network server, the Corresponding Source may be on a different server (operated by you or a third party) that supports equivalent copying facilities, provided you maintain clear directions next to the object code saying where to find the Corresponding Source. Regardless of what server hosts the Corresponding Source, you remain obligated to ensure that it is available for as long as needed to satisfy these requirements.
- e) Convey the object code using peer-to-peer transmission, provided you inform other peers where the object code and Corresponding Source of the work are being offered to the general public at no charge under subsection 6d.

A separable portion of the object code, whose source code is excluded from the Corresponding Source as a System Library, need not be included in conveying the object code work.

A "User Product" is either (1) a "consumer product", which means any tangible personal property which is normally used for personal, family, or household purposes, or (2) anything designed or sold for incorporation into a dwelling. In determining whether a product is a consumer product, doubtful cases shall be resolved in favor of coverage. For a particular product received by a particular user, "normally used" refers to a typical or common use of that class of product, regardless of the status of the particular user or of the way in which the particular user actually uses, or expects or is expected to use, the product. A product is a consumer product regardless of whether the product has substantial commercial, industrial or non-consumer uses, unless such uses represent the only significant mode of use of the product.

"Installation Information" for a User Product means any methods, procedures, authorization keys, or other information required to install and execute modified versions of a covered work in that User Product from a modified version of its Corresponding Source. The information must suffice to ensure that the continued functioning of the modified object code is in no case prevented or interfered with solely because modification has been made.

If you convey an object code work under this section in, or with, or specifically for use in, a User Product, and the conveying occurs as part of a transaction in which the right of possession and use of the User Product is transferred to the recipient in perpetuity or for a fixed term (regardless of how the transaction is characterized), the Corresponding Source conveyed under this section must be accompanied by the Installation Information. But this requirement does not apply if neither you nor any third party retains the ability to install modified object code on the User Product (for example, the work has been installed in ROM).

The requirement to provide Installation Information does not include a requirement to continue to provide support service, warranty, or updates for a work that has been modified or installed by the recipient, or for the User Product in which it has been modified or installed. Access to a network may be denied when the modification itself materially and adversely affects the operation of the network or violates the rules and protocols for communication across the network.

Corresponding Source conveyed, and Installation Information provided, in accord with this section must be in a format that is publicly documented (and with an implementation available to the public in source code form), and must require no special password or key for unpacking, reading or copying.

7. Additional Terms.

"Additional permissions" are terms that supplement the terms of this License by making exceptions from one or more of its conditions. Additional permissions that are applicable to the entire Program shall be treated as though they were included in this License, to the extent that they are valid under applicable law. If additional permissions apply only to part of the Program, that part may be used separately under those permissions, but the entire Program remains governed by this License without regard to the additional permissions.

When you convey a copy of a covered work, you may at your option remove any additional permissions from that copy, or from any part of it. (Additional permissions may be written to require their own removal in certain cases when you modify the work.) You may place additional permissions on material, added by you to a covered work, for which you have or can give appropriate copyright permission.

Notwithstanding any other provision of this License, for material you add to a covered work, you may (if authorized by the copyright holders of that material) supplement the terms of this License with terms:

a) Disclaiming warranty or limiting liability differently from the terms of sections 15 and 16 of this License; or b) Requiring preservation of specified reasonable legal notices or author attributions in that material or in the Appropriate Legal Notices displayed by works containing it; or

- c) Prohibiting misrepresentation of the origin of that material, or requiring that modified versions of such material be marked in reasonable ways as different from the original version; or
- d) Limiting the use for publicity purposes of names of licensors or authors of the material; or
- e) Declining to grant rights under trademark law for use of some trade names, trademarks, or service marks; or
- f) Requiring indemnification of licensors and authors of that material by anyone who conveys the material (or modified versions of it) with contractual assumptions of liability to the recipient, for any liability that these contractual assumptions directly impose on those licensors and authors.

All other non-permissive additional terms are considered "further restrictions" within the meaning of section 10. If the Program as you received it, or any part of it, contains a notice stating that it is governed by this License along with a term that is a further restriction, you may remove that term. If a license document contains a further restriction but permits relicensing or conveying under this License, you may add to a covered work material governed by the terms of that license document, provided that the further restriction does not survive such relicensing or conveying.

If you add terms to a covered work in accord with this section, you must place, in the relevant source files, a statement of the additional terms that apply to those files, or a notice indicating where to find the applicable terms.

Additional terms, permissive or non-permissive, may be stated in the form of a separately written license, or stated as exceptions; the above requirements apply either way.

8. Termination.

You may not propagate or modify a covered work except as expressly provided under this License. Any attempt otherwise to propagate or modify it is void, and will automatically terminate your rights under this License (including any patent licenses granted under the third paragraph of section 11).

However, if you cease all violation of this License, then your license from a particular copyright holder is reinstated (a) provisionally, unless and until the copyright holder explicitly and finally terminates your license, and (b) permanently, if the copyright holder fails to notify you of the violation by some reasonable means prior to 60 days after the cessation.

Moreover, your license from a particular copyright holder is reinstated permanently if the copyright holder notifies you of the violation by some reasonable means, this is the first time you have received notice of violation of this

License (for any work) from that copyright holder, and you cure the violation prior to 30 days after your receipt of the notice.

Termination of your rights under this section does not terminate the licenses of parties who have received copies or rights from you under this License. If your rights have been terminated and not permanently reinstated, you do not qualify to receive new licenses for the same material under section 10.

9. Acceptance Not Required for Having Copies.

You are not required to accept this License in order to receive or run a copy of the Program. Ancillary propagation of a covered work occurring solely as a consequence of using peer-to-peer transmission to receive a copy likewise does not require acceptance. However, nothing other than this License grants you permission to propagate or modify any covered work. These actions infringe copyright if you do not accept this License. Therefore, by modifying or propagating a covered work, you indicate your acceptance of this License to do so.

10. Automatic Licensing of Downstream Recipients.

Each time you convey a covered work, the recipient automatically receives a license from the original licensors, to run, modify and propagate that work, subject to this License. You are not responsible for enforcing compliance by third parties with this License.

An "entity transaction" is a transaction transferring control of an organization, or substantially all assets of one, or subdividing an organization, or merging organizations. If propagation of a covered work results from an entity transaction, each party to that transaction who receives a copy of the work also receives whatever licenses to the work the party's predecessor in interest had or could give under the previous paragraph, plus a right to possession of the Corresponding Source of the work from the predecessor in interest, if the predecessor has it or can get it with reasonable efforts.

You may not impose any further restrictions on the exercise of the rights granted or affirmed under this License. For example, you may not impose a license fee, royalty, or other charge for exercise of rights granted under this License, and you may not initiate litigation (including a cross-claim or counterclaim in a lawsuit) alleging that any patent claim is infringed by making, using, selling, offering for sale, or importing the Program or any portion of it.

11. Patents.

A "contributor" is a copyright holder who authorizes use under this License of the Program or a work on which the Program is based. The work thus licensed is called the contributor's "contributor version".

A contributor's "essential patent claims" are all patent claims owned or controlled by the contributor, whether already acquired or hereafter acquired, that would be infringed by some manner, permitted by this License, of making, using, or selling its contributor version, but do not include claims that would be infringed only as a consequence of further modification of the contributor version. For purposes of this definition, "control" includes the right to grant patent sublicenses in a manner consistent with the requirements of this License.

Each contributor grants you a non-exclusive, worldwide, royalty-free patent license under the contributor's essential patent claims, to make, use, sell, offer for sale, import and otherwise run, modify and propagate the contents of its contributor version.

In the following three paragraphs, a "patent license" is any express agreement or commitment, however denominated, not to enforce a patent (such as an express permission to practice a patent or covenant not to sue for patent infringement). To "grant" such a patent license to a party means to make such an agreement or commitment not to enforce a patent against the party.

If you convey a covered work, knowingly relying on a patent license, and the Corresponding Source of the work is not available for anyone to copy, free of charge and under the terms of this License, through a publicly available network server or other readily accessible means, then you must either (1) cause the Corresponding Source to be so available, or (2) arrange to deprive yourself of the benefit of the patent license for this particular work, or (3) arrange, in a manner consistent with the requirements of this License, to extend the patent license to downstream recipients. "Knowingly relying" means you have actual knowledge that, but for the patent license, your conveying the covered work in a country, or your recipient's use of the covered work in a country, would infringe one or more identifiable patents in that country that you have reason to believe are valid.

If, pursuant to or in connection with a single transaction or arrangement, you convey, or propagate by procuring conveyance of, a covered work, and grant a patent license to some of the parties receiving the covered work authorizing them to use, propagate, modify or convey a specific copy of the covered work, then the patent license you grant is automatically extended to all recipients of the covered work and works based on it.

A patent license is "discriminatory" if it does not include within the scope of its coverage, prohibits the exercise of, or is conditioned on the non-exercise of one or more of the rights that are specifically granted under this License. You may not convey a covered work if you are a party to an arrangement with a third party that is in the business of distributing software, under which you make payment to the third party based on the extent of your activity of conveying the work, and under which the third party grants, to any of the parties who would receive

the covered work from you, a discriminatory patent license (a) in connection with copies of the covered work conveyed by you (or copies made from those copies), or (b) primarily for and in connection with specific products or compilations that contain the covered work, unless you entered into that arrangement, or that patent license was granted, prior to 28 March 2007.

Nothing in this License shall be construed as excluding or limiting any implied license or other defenses to infringement that may otherwise be available to you under applicable patent law.

12. No Surrender of Others' Freedom.

If 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 convey a covered work so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not convey it at all. For example, if you agree to terms that obligate you to collect a royalty for further conveying from those to whom you convey the Program, the only way you could satisfy both those terms and this License would be to refrain entirely from conveying the Program.

13. Use with the GNU Affero General Public License.

Notwithstanding any other provision of this License, you have permission to link or combine any covered work with a work licensed under version 3 of the GNU Affero General Public License into a single combined work, and to convey the resulting work. The terms of this License will continue to apply to the part which is the covered work, but the special requirements of the GNU Affero General Public License, section 13, concerning interaction through a network will apply to the combination as such.

14. Revised Versions of this License.

The Free Software Foundation may publish revised and/or new versions of the GNU 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 that a certain numbered version of the GNU General Public License "or any later version" applies to it, you have the option of following the terms and conditions either of that numbered version or of any later version published by the Free Software Foundation. If the Program does not specify a version number of the GNU General Public License, you may choose any version ever published by the Free Software Foundation.

If the Program specifies that a proxy can decide which future versions of the GNU General Public License can be used, that proxy's public statement of acceptance of a version permanently authorizes you to choose that version for the Program.

Later license versions may give you additional or different permissions. However, no additional obligations are imposed on any author or copyright holder as a result of your choosing to follow a later version.

15. Disclaimer of Warranty.

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.

16. Limitation of Liability.

IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MODIFIES AND/OR CONVEYS 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.

17. Interpretation of Sections 15 and 16.

If the disclaimer of warranty and limitation of liability provided above cannot be given local legal effect according to their terms, reviewing courts shall apply local law that most closely approximates an absolute waiver of all civil liability in connection with the Program, unless a warranty or assumption of liability accompanies a copy of the Program in return for a fee.

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 state 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 3 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, see https://www.gnu.org/licenses/.

Also add information on how to contact you by electronic and paper mail.

If the program does terminal interaction, make it output a short notice like this when it starts in an interactive mode:

This program 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, your program's commands might be different; for a GUI interface, you would use an "about box".

You should also get your employer (if you work as a programmer) or school, if any, to sign a "copyright disclaimer" for the program, if necessary. For more information on this, and how to apply and follow the GNU GPL, see https://www.gnu.org/licenses/.

The GNU 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. But first, please read https://www.gnu.org/licenses/why-not-lgpl.html.

GNU General Public License v2.0 only

Identifier: GPL-2.0

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.

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 an idea of what it does.>
Copyright (C) < yyyy> <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.

ISC License

Identifier: ISC

ISC License

<copyright notice>

Permission to use, copy, modify, and /or 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.

Creative Commons Zero v1.0 Universal

Identifier: CC0-1.0

Creative Commons Legal Code

CC0 1.0 Universal

CREATIVE COMMONS CORPORATION IS NOT A LAW FIRM AND DOES NOT PROVIDE LEGAL SERVICES. DISTRIBUTION OF THIS DOCUMENT DOES NOT CREATE AN ATTORNEY-CLIENT RELATIONSHIP. CREATIVE COMMONS PROVIDES THIS INFORMATION ON AN "AS-IS" BASIS. CREATIVE COMMONS MAKES NO WARRANTIES REGARDING THE USE OF THIS DOCUMENT OR THE INFORMATION OR WORKS PROVIDED HEREUNDER, AND DISCLAIMS LIABILITY FOR DAMAGES RESULTING FROM THE USE OF THIS DOCUMENT OR THE INFORMATION OR WORKS PROVIDED HEREUNDER.

Statement of Purpose

The laws of most jurisdictions throughout the world automatically confer exclusive Copyright and Related Rights (defined below) upon the creator and subsequent owner(s) (each and all, an "owner") of an original work of authorship and/or a database (each, a "Work").

Certain owners wish to permanently relinquish those rights to a Work for the purpose of contributing to a commons of creative, cultural and scientific works ("Commons") that the public can reliably and without fear of later claims of infringement build upon, modify, incorporate in other works, reuse and redistribute as freely as possible in any form whatsoever and for any purposes, including without limitation commercial purposes. These owners may contribute to the Commons to promote the ideal of a free culture and the further production of creative, cultural and scientific works, or to gain reputation or greater distribution for their Work in part through the use and efforts of others.

For these and/or other purposes and motivations, and without any expectation of additional consideration or compensation, the person associating CC0 with a Work (the "Affirmer"), to the extent that he or she is an owner of Copyright and Related Rights in the Work, voluntarily elects to apply CC0 to the Work and publicly distribute the Work under its terms, with knowledge of his or her Copyright and Related Rights in the Work and the meaning and intended legal effect of CC0 on those rights.

- 1. Copyright and Related Rights. A Work made available under CC0 may be protected by copyright and related or neighboring rights ("Copyright and Related Rights"). Copyright and Related Rights include, but are not limited to, the following:
 - i. the right to reproduce, adapt, distribute, perform, display, communicate, and translate a Work;
 - ii. moral rights retained by the original author(s) and/or performer(s);
 - iii. publicity and privacy rights pertaining to a person's image or likeness depicted in a Work;
 - iv. rights protecting against unfair competition in regards to a Work, subject to the limitations in paragraph 4(a), below;
 - v. rights protecting the extraction, dissemination, use and reuse of data in a Work;
 - vi. database rights (such as those arising under Directive 96/9/EC of the European Parliament and of the Council of 11 March 1996 on the legal protection of databases, and under any national implementation thereof, including any amended or successor version of such directive); and
 - vii. other similar, equivalent or corresponding rights throughout the world based on applicable law or treaty, and any national implementations thereof.
- 2. Waiver. To the greatest extent permitted by, but not in contravention of, applicable law, Affirmer hereby overtly, fully, permanently, irrevocably and unconditionally waives, abandons, and surrenders all of Affirmer's Copyright and Related Rights and associated claims and causes of action, whether now known or unknown

(including existing as well as future claims and causes of action), in the Work (i) in all territories worldwide, (ii) for the maximum duration provided by applicable law or treaty (including future time extensions), (iii) in any current or future medium and for any number of copies, and (iv) for any purpose whatsoever, including without limitation commercial, advertising or promotional purposes (the "Waiver"). Affirmer makes the Waiver for the benefit of each member of the public at large and to the detriment of Affirmer's heirs and successors, fully intending that such Waiver shall not be subject to revocation, rescission, cancellation, termination, or any other legal or equitable action to disrupt the quiet enjoyment of the Work by the public as contemplated by Affirmer's express Statement of Purpose.

- 3. Public License Fallback. Should any part of the Waiver for any reason be judged legally invalid or ineffective under applicable law, then the Waiver shall be preserved to the maximum extent permitted taking into account Affirmer's express Statement of Purpose. In addition, to the extent the Waiver is so judged Affirmer hereby grants to each affected person a royalty-free, non transferable, non sublicensable, non exclusive, irrevocable and unconditional license to exercise Affirmer's Copyright and Related Rights in the Work (i) in all territories worldwide, (ii) for the maximum duration provided by applicable law or treaty (including future time extensions), (iii) in any current or future medium and for any number of copies, and (iv) for any purpose whatsoever, including without limitation commercial, advertising or promotional purposes (the "License"). The License shall be deemed effective as of the date CC0 was applied by Affirmer to the Work. Should any part of the License for any reason be judged legally invalid or ineffective under applicable law, such partial invalidity or ineffectiveness shall not invalidate the remainder of the License, and in such case Affirmer hereby affirms that he or she will not (i) exercise any of his or her remaining Copyright and Related Rights in the Work or (ii) assert any associated claims and causes of action with respect to the Work, in either case contrary to Affirmer's express Statement of Purpose.
- 4. Limitations and Disclaimers.
 - a. No trademark or patent rights held by Affirmer are waived, abandoned, surrendered, licensed or otherwise affected by this document.
 - b. Affirmer offers the Work as-is and makes no representations or warranties of any kind concerning the Work, express, implied, statutory or otherwise, including without limitation warranties of title, merchantability, fitness for a particular purpose, non infringement, or the absence of latent or other defects, accuracy, or the present or absence of errors, whether or not discoverable, all to the greatest extent permissible under applicable law.
 - c. Affirmer disclaims responsibility for clearing rights of other persons that may apply to the Work or any use thereof, including without limitation any person's Copyright and Related Rights in the Work. Further, Affirmer disclaims responsibility for obtaining any necessary consents, permissions or other rights required for any use of the Work.

d. Affirmer understands and acknowledges that Creative Commons is not a party to this document and has no duty or obligation with respect to this CC0 or use of the Work.

Common Development and Distribution License 1.1

Identifier: CDDL-1.1

COMMON DEVELOPMENT AND DISTRIBUTION LICENSE (CDDL) Version 1.1

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 recipient's 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.

Oracle 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, MERCHANTABLE, FIT FOR A PARTICULAR PURPOSE OR NON-INFRINGING. 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. If You assert a patent infringement claim against Participant alleging that the Participant Software directly or indirectly infringes any patent where such claim is resolved (such as by license or settlement) prior to the initiation of patent infringement litigation, then the reasonable value of the licenses granted by such Participant under Sections 2.1 or 2.2 shall be taken into account in determining the amount or value of any payment or license.
- 6.4. 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 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 jurisdiction's 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.

Academic Free License v2.1

Identifier: AFL-2.1

The Academic Free License v.2.1

This Academic Free License (the "License") applies to any original work of authorship (the "Original Work") whose owner (the "Licensor") has placed the following notice immediately following the copyright notice for the Original Work:

Licensed under the Academic Free License version 2.1

- 1) Grant of Copyright License. Licensor hereby grants You a world-wide, royalty-free, non-exclusive, perpetual, sublicenseable license to do the following:
 - a) to reproduce the Original Work in copies;
 - b) to prepare derivative works ("Derivative Works") based upon the Original Work;
 - c) to distribute copies of the Original Work and Derivative Works to the public;
 - d) to perform the Original Work publicly; and
 - e) to display the Original Work publicly.

- 2) Grant of Patent License. Licensor hereby grants You a world-wide, royalty-free, non-exclusive, perpetual, sublicenseable license, under patent claims owned or controlled by the Licensor that are embodied in the Original Work as furnished by the Licensor, to make, use, sell and offer for sale the Original Work and Derivative Works.
 3) Grant of Source Code License. The term "Source Code" means the preferred form of the Original Work for making modifications to it and all available documentation describing how to modify the Original Work. Licensor hereby agrees to provide a machine-readable copy of the Source Code of the Original Work along with each copy of the Original Work that Licensor distributes. Licensor reserves the right to satisfy this obligation by placing a machine-readable copy of the Source Code in an information repository reasonably calculated to permit inexpensive and convenient access by You for as long as Licensor continues to distribute the Original Work, and by publishing the address of that information repository in a notice immediately following the copyright notice that applies to the Original Work.
- 4) Exclusions From License Grant. Neither the names of Licensor, nor the names of any contributors to the Original Work, nor any of their trademarks or service marks, may be used to endorse or promote products derived from this Original Work without express prior written permission of the Licensor. Nothing in this License shall be deemed to grant any rights to trademarks, copyrights, patents, trade secrets or any other intellectual property of Licensor except as expressly stated herein. No patent license is granted to make, use, sell or offer to sell embodiments of any patent claims other than the licensed claims defined in Section 2. No right is granted to the trademarks of Licensor even if such marks are included in the Original Work. Nothing in this License shall be interpreted to prohibit Licensor from licensing under different terms from this License any Original Work that Licensor otherwise would have a right to license.
- 5) This section intentionally omitted.
- 6) Attribution Rights. You must retain, in the Source Code of any Derivative Works that You create, all copyright, patent or trademark notices from the Source Code of the Original Work, as well as any notices of licensing and any descriptive text identified therein as an "Attribution Notice." You must cause the Source Code for any Derivative Works that You create to carry a prominent Attribution Notice reasonably calculated to inform recipients that You have modified the Original Work.
- 7) Warranty of Provenance and Disclaimer of Warranty. Licensor warrants that the copyright in and to the Original Work and the patent rights granted herein by Licensor are owned by the Licensor or are sublicensed to You under the terms of this License with the permission of the contributor(s) of those copyrights and patent rights. Except as expressly stated in the immediately proceeding sentence, the Original Work is provided under this License on an "AS IS" BASIS and WITHOUT WARRANTY, either express or implied, including, without limitation, the warranties of NON-INFRINGEMENT, MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY OF THE ORIGINAL WORK IS WITH YOU. This DISCLAIMER OF WARRANTY constitutes an essential part of this License. No license to Original Work is granted hereunder except under this disclaimer.

- 8) Limitation of Liability. Under no circumstances and under no legal theory, whether in tort (including negligence), contract, or otherwise, shall the Licensor be liable to any person for any direct, indirect, special, incidental, or consequential damages of any character arising as a result of this License or the use of the Original Work including, without limitation, damages for loss of goodwill, work stoppage, computer failure or malfunction, or any and all other commercial damages or losses. This limitation of liability shall not apply to liability for death or personal injury resulting from Licensor'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.
- 9) Acceptance and Termination. If You distribute copies of the Original Work or a Derivative Work, You must make a reasonable effort under the circumstances to obtain the express assent of recipients to the terms of this License. Nothing else but this License (or another written agreement between Licensor and You) grants You permission to create Derivative Works based upon the Original Work or to exercise any of the rights granted in Section 1 herein, and any attempt to do so except under the terms of this License (or another written agreement between Licensor and You) is expressly prohibited by U.S. copyright law, the equivalent laws of other countries, and by international treaty. Therefore, by exercising any of the rights granted to You in Section 1 herein, You indicate Your acceptance of this License and all of its terms and conditions.
- 10) Termination for Patent Action. This License shall terminate automatically and You may no longer exercise any of the rights granted to You by this License as of the date You commence an action, including a cross-claim or counterclaim, against Licensor or any licensee alleging that the Original Work infringes a patent. This termination provision shall not apply for an action alleging patent infringement by combinations of the Original Work with other software or hardware.
- 11) Jurisdiction, Venue and Governing Law. Any action or suit relating to this License may be brought only in the courts of a jurisdiction wherein the Licensor resides or in which Licensor conducts its primary business, and under the laws of that jurisdiction excluding its conflict-of-law provisions. The application of the United Nations Convention on Contracts for the International Sale of Goods is expressly excluded. Any use of the Original Work outside the scope of this License or after its termination shall be subject to the requirements and penalties of the U.S. Copyright Act, 17 U.S.C. § 101 et seq., the equivalent laws of other countries, and international treaty. This section shall survive the termination of this License.
- 12) Attorneys Fees. In any action to enforce the terms of this License or seeking damages relating thereto, the prevailing party shall be entitled to recover its costs and expenses, including, without limitation, reasonable attorneys' fees and costs incurred in connection with such action, including any appeal of such action. This section shall survive the termination of this License.
- 13) Miscellaneous. This License represents the complete agreement concerning the 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.

14) Definition of "You" in This License. "You" throughout this License, whether in upper or lower case, 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 that controls, is controlled by, or is under common control with you. For 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.

15) Right to Use. You may use the Original Work in all ways not otherwise restricted or conditioned by this License or by law, and Licensor promises not to interfere with or be responsible for such uses by You.

This license is Copyright (C) 2003-2004 Lawrence E. Rosen. All rights reserved. Permission is hereby granted to copy and distribute this license without modification. This license may not be modified without the express written permission of its copyright owner.

Indiana University Extreme! Lab Software License Version 1.1.1

LicenseRef-Indiana-Extreme!Lab-1.1.1

Copyright (c) 2002 Extreme! Lab, Indiana University. 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. The end-user documentation included with the redistribution, if any, must include the following acknowledgment:

"This product includes software developed by the Indiana University Extreme! Lab (http://www.extreme.indiana.edu/)."

Alternately, this acknowledgment may appear in the software itself, if and wherever such third-party acknowledgments normally appear.

- 4. The names "Indiana University" and "Indiana University Extreme! Lab" must not be used to endorse or promote products derived from this software without prior written permission. For written permission, please contact (http://www.extreme.indiana.edu/).
- 5. Products derived from this software may not use "Indiana University" name nor may "Indiana University" appear in their name, without prior written permission of the Indiana University.

THIS SOFTWARE IS PROVIDED "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 AUTHORS, COPYRIGHT HOLDERS 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.

Special Exception to the GNU General Public License

Identifier: LicenseRef-Lafortune-Linking-Exception

Copyright © 2002-2014 Eric Lafortune

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

In addition, as a special exception, Eric Lafortune gives permission to link the code of this program with the following stand-alone applications:

- Apache Ant,
- Apache Maven,
- the Google Android SDK,
- the Eclipse ProGuardDT GUI,
- the EclipseME JME IDE,
- the Oracle NetBeans Java IDE,
- the Oracle JME Wireless Toolkit,
- the Simple Build Tool for Scala (and its scripts), and
- the Sanaware Tools.

and distribute linked combinations including the two. You must obey the GNU General Public License in all respects for all of the code used other than these programs. If you modify this file, you may extend this exception to your version of the file, but you are not obligated to do so. If you do not wish to do so, delete this exception statement from your version.

LicenseRef SQLite

Identifier: LicenseRef-SQLite

2001 September 15

The author disclaims copyright to this source code. In place of a legal notice, here is a blessing:

May you do good and not evil.
May you find forgiveness for yourself and forgive others.
May you share freely, never taking more than you give.

This header file defines the interface that the SQLite library presents to client programs. If a C-function, structure, datatype, or constant definition does not appear in this file, then it is not a published API of SQLite, is subject to change without notice, and should not be referenced by programs that use SQLite.

Some of the definitions that are in this file are marked as "experimental". Experimental interfaces are normally new

features recently added to SQLite. We do not anticipate changes to experimental interfaces but reserve the right to make minor changes if experience from use "in the wild" suggest such changes are prudent.

The official C-language API documentation for SQLite is derived from comments in this file. This file is the authoritative source on how SQLite interfaces are suppose to operate.

The name of this file under configuration management is "sqlite.h.in". The makefile makes some minor changes to this file (such as inserting the version number) and changes its name to "sqlite3.h" as part of the build process.

LicenseRef Simplify Commercial

Identifier: LicenseRef-Simplify-Commercial

The commercial license of Simplify and smallivm allows you to use them in commercial products.

- The commercial license is perpetual and royalty-free.
- You have the right to distribute the binary and modifications.
- No source code redistribution is allowed in any way.

Contact rednaga@protonmail.com for further information.

Linux Syscall Note

Identifier: Linux-syscall-note

NOTE! This copyright does *not* cover user programs that use kernel services by normal system calls - this is merely considered normal use of the kernel, and does *not* fall under the heading of "derived work". Also note that the GPL below is copyrighted by the Free Software Foundation, but the instance of code that it refers to (the Linux kernel) is copyrighted by me and others who actually wrote it.

Also note that the only valid version of the GPL as far as the kernel is concerned is _this_ particular version of the license (ie v2, not v2.2 or v3.x or whatever), unless explicitly otherwise stated.

Linus Torvalds