

LICENSING BIBLE

Project: **scriva/scrivaapisrv**Branch: **mainline** (041058631416aca30f1d54225f4f60d9b5df9772)

Created on 2025-07-05 14:58 UTC

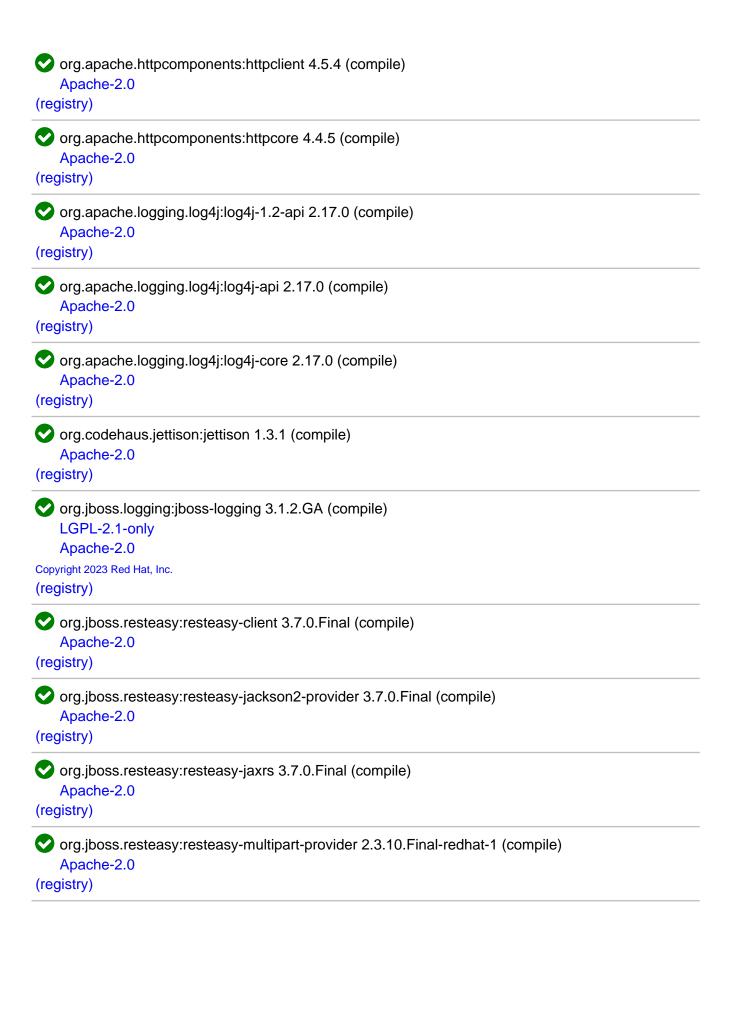
Bill of components

(registry)

Libraries (java) aopalliance:aopalliance 1.0 (compile) **PUBDOM** (registry) asm:asm 3.3.1 (compile) **BSD BSD-3-Clause** (registry) cglib:cglib 2.2.2 (compile) Apache-2.0 (registry) com.fasterxml.jackson.core:jackson-annotations 2.9.9 (compile) Apache-2.0 (registry) com.fasterxml.jackson.core:jackson-core 2.9.9 (compile) Apache-2.0 Copyright (c) 2007 Tatu Saloranta, tatu.salorantaiki.fi/ (registry) com.fasterxml.jackson.core:jackson-databind 2.9.9 (compile) Apache-2.0 LGPL-3.0-only Copyright 2011 Google Inc. All Rights Reserved. (registry) com.fasterxml.jackson.jaxrs:jackson-jaxrs-base 2.9.9 (compile) Apache-2.0 (registry) com.fasterxml.jackson.jaxrs:jackson-jaxrs-json-provider 2.9.9 (compile) Apache-2.0 (registry) com.fasterxml.jackson.module:jackson-module-jaxb-annotations 2.9.9 (compile) Apache-2.0 (registry) com.googlecode.json-simple:json-simple 1.1.1 (compile) Apache-2.0

commons-beanutils:commons-beanutils 1.9.1 (compile) Apache-2.0 (registry) commons-httpclient:commons-httpclient 2.0.2 (compile) Apache-2.0 (registry) commons-io:commons-io 2.5 (compile) Apache-2.0 (registry) commons-logging:commons-logging 1.1.1 (compile) Apache-2.0 (registry) csi-apachesoap 1.4.6 (compile) Apache-2.0 (registry) csi-core 1.4.6 (compile) Apache-2.0 (registry) csi-ejb 1.4.6 (compile) Apache-2.0 (registry) csi-rmi 1.4.6 (compile) Apache-2.0 (registry) csi-stadapter 1.4.6 (compile) Apache-2.0 (registry) ejb 2.1 (compile) **CDDL** (registry) io.swagger:swagger-annotations 1.5.18 (compile) Apache-2.0 (registry) io.swagger:swagger-jaxrs 1.5.18 (compile) Apache-2.0 (registry)

iridev2-pep-intf 2.0.0 (compile) Apache-2.0 Libreria rilasciata su richiesta (CSI Piemonte) (registry) jaas 1.0 (compile) **CDDL** (registry) ✓ javax.mail:mail -- (compile) **CDDL** GPL-2.0-only (registry) javax.validation:validation-api 1.0.0.GA-redhat-3 (compile) Apache-2.0 (registry) javax.xml.bind:activation 1.0.2 (compile) **CDDL-1.1** (registry) jaxp 1.1 (compile) Apache-2.0 (registry) ims 1.0.2 (compile) **CDDL** (registry) indi 1.2.1 (compile) **CDDL** (registry) net.sf.dozer:dozer 5.5.1 (compile) Apache-2.0 (registry) net.sf.dozer:dozer-spring 5.5.1 (compile) Apache-2.0 (registry) org.apache.commons:commons-lang3 3.1 (compile) Apache-2.0 (registry)



org.jboss.spec.javax.annotation:jboss-annotations-api_1.3_spec 1.0.1.Final (compile) **CDDL-1.1** Copyright (C) <year> <name of author> (registry) org.jboss.spec.javax.ws.rs:jboss-jaxrs-api_2.1_spec 1.0.2.Final (compile) CDDL-1.0 GPL-2.0-only Copyright (C) <year> <name of author> (registry) org.jboss.spec.javax.xml.bind:jboss-jaxb-api_2.3_spec 1.0.1.Final (compile) CDDL-1.1 Copyright (C) 1989, 1991 Free Software Foundation, Inc.51 Franklin Street, Fifth FloorBoston, MA 02110-1335USA (registry) org.reactivestreams:reactive-streams 1.0.2 (compile) CC0-1.0 Copyright 2014 Reactive Streams (registry) org.slf4j:slf4j-api 1.7.25 (compile) **MIT** (registry) org.slf4j:slf4j-nop 1.6.1 (compile) **MIT** (registry) org.springframework:spring-aop 4.3.24.RELEASE (compile) Apache-2.0 Copyright 20042008 the original author or authors. (registry) org.springframework:spring-beans 4.3.24.RELEASE (compile) Apache-2.0 Copyright 20042008 the original author or authors. (registry) org.springframework:spring-context 4.3.24.RELEASE (compile) Apache-2.0 Copyright 20042008 the original author or authors. (registry)

org.springframework:spring-core 4.3.24.RELEASE (compile) Apache-2.0 Copyright 20042008 the original author or authors. (registry) org.springframework:spring-expression 4.3.24.RELEASE (compile) Apache-2.0 Copyright 20042008 the original author or authors. (registry) org.springframework:spring-instrument 4.3.24.RELEASE (compile) Apache-2.0 Copyright 20042008 the original author or authors. (registry) org.springframework:spring-jdbc 4.3.24.RELEASE (compile) Apache-2.0 Copyright 20042008 the original author or authors. (registry) org.springframework:spring-tx 4.3.24.RELEASE (compile) Apache-2.0 Copyright 20042008 the original author or authors. (registry) org.springframework:spring-web 4.3.24.RELEASE (compile) Apache-2.0 Copyright 20042008 the original author or authors. (registry) org.zenframework.z8.dependencies.servlet:servlet-api-2.5 2.0 (compile) (registry) servlet 2.4 (compile) CDDL-1.1 (registry) soap:soap 2.3.1 (compile) **CDDL** (registry) util-perf 1.0.0 (compile) Apache-2.0 (registry)

weblogic server 9.2 mp2 mon jun 25 01:32:01 edt 2007 952826 9.2.2.0 (compile) PROPRIETARY

Oracle

(registry)



(registry)



List of all licenses found in this scan

Apache License 2.0	Apache-2.0
BSD License (Generic)	BSD
BSD 3-Clause "New" or "Revised" License	BSD-3-Clause
Creative Commons Zero v1.0 Universal	CC0-1.0
CDDL License (Generic)	CDDL
Common Development and Distribution License 1.0	CDDL-1.0
Common Development and Distribution License 1.1	CDDL-1.1
GNU General Public License v2.0 only	GPL-2.0-only
GNU Lesser General Public License v2.1 only	LGPL-2.1-only
GNU Lesser General Public License v3.0 only	LGPL-3.0-only
MIT License	MIT
PROPRIETARY (Generic)	PROPRIETARY
Public Domain	PUBDOM

Apache License 2.0

https://spdx.org/licenses/Apache-2.0.html

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.

BSD License (Generic)

http://www.linfo.org/bsdlicense.html

BSD license definition LINFO <>

BSD License Definition * <>

The BSD license is a class of extremely simple and very liberal licenses for computer software that was originally developed at the University of California at Berkeley (UCB). It was first used in 1980 for theBerkeley Source Distribution (BSD), also known as BSD UNIX, an enhanced version of the original UNIX operating system that was first written in 1969 by Ken Thompson at Bell Labs.

The only restrictions placed on users of software released under a typical BSD license are that if they redistribute such software in any form, with or without modification, they must include in the redistribution (1) the original copyright notice, (2) a list of two simple restrictions and (3) a disclaimer of liability. These restrictions can be summarized as (1) one should not claim that they wrote the software if they did not write it and (2) one should not sue the developer if the software does not function as expected or as desired. Some BSD licenses additionally include a clause that restricts the use of the name of the project (or the names of its contributors) for endorsing or promoting derivative works.

The most basic definition of a derivative work is a product that is based on, or incorporates, one or more already existing works. This can become a complex issue, particularly with regard to software, but the primary indicator that a software program is a derivative of another program is if it includes source code <> from the original program, even if the source code has been modified, including improving, extending, reordering or translating it into another programming language.

Source code is the version of software (usually an application program or an operating system <>) as it is originally written (i.e., typed into a computer) by a human inplain text <> (i.e., human readable alpha <>numeric characters <>). Source code can be written in any of hundreds of programming languages, some of the most popular of which areC <>, C++ and Java.

Due to the extremely minimal restrictions of BSD-style licenses, software released under such licenses can be freely modified and used inproprietary <> (i.e., commercial) software for which the source code is kept secret.

It is possible for a product to be distributed under a BSD-style license and for some other license to apply as well. This was, in fact, the case with very early versions of BSD UNIX, which included both new code written at UCB and code from the original versions of UNIX written at Bell Labs.

BSD-style licenses have been very successful, and they are now widely used for a variety of software. Among the many products released under this class of licenses are all of the major modern descendants of the original BSD UNIX, i.e., FreeBSD, OpenBSD, NetBSD and Darwin (the foundation of the Mac OS X). BSD-licensed software is also commonly included inLinux <> distributions <> (i.e., versions) and has even been incorporated into some of the Microsoft Windows operating systems.

BSD Licenses Versus the GPL

The GPL <> (GNU <> General Public License) is by far the most widely used license forfree software <> (i.e., software whose source code is available at no cost for anyone to use for any purpose). The Linuxkernel <> (i.e., the core of the operating system) as well as much of the other software generally included in Linux distributions have been released under the terms of the GPL.

Although far fewer programs are released under BSD-style licenses, this class of licenses is disproportionately important because of the widespread use of BSD-licensed code in both free and proprietary operating systems.

Possibly the biggest difference between the GPL and BSD licenses is the fact that the former is acopyleft license and the latter is not. Copyleft is the application of copyright law to permit the free creation of derivative works but requiring that such works be redistributable under the same terms (i.e.,

the same license) as the original work.

Closely related to this is the fact that, in sharp contrast to the GPL, BSD-style licenses do not require that derivative works based on BSD-licensed software make the source code for such derivative works freely available. This allows the direct incorporation of code from open source projects (i.e., from BSD-licensed software) into closed source projects. The GPL, however, specifically states: "This General Public License does not permit incorporating your program into proprietary programs."

A third difference is that the GPL is a single, copyrighted (by the Free Software Foundation, Inc.) license with no variants. BSD-style licenses, in contrast, are commonly modified for the specific situation.

In many cases, the use of open source code can allow companies to develop products more quickly and with less expense than if they wrote them with entirely original code. The fact that derivative products of BSD-licensed software are not required to be open source can be very useful for developers who want to create commercial products from open source code but who want to keep their modifications and/or extensions secret. Interestingly, companies that initially develop closed source products based on BSD-licensed code tend to be more likely to eventually make their source code publicly available than are companies that develop products that do not incorporate code code.

The issue of which license provides greater freedom and does the most to promote the development of improved software is highly controversial. In spite of the seeming simplicity of the licenses, there are no simple answers.

One of the most controversial properties of the GPL is its viral nature. This means that once some useful modification or addition to a GPL licensed program has been released, the source code of the modified or extended program must likewise be made freely available. That is, the GPL is a mechanism that deprives developers of the freedom to make their source code secret at some future date, although the developer can still use such code in commercial products. Critics of the GPL claim that this diminishes or destroys the commercial value of software because others can produce products that incorporate the same code.

GPL advocates claim that although the GPL is contagious in theory, it is not necessarily so in practice. Rather, they assert, it merely places restrictions on the code's re-use, as do BSD-style licenses.

One thing about both the GPL and the BSD-style licenses for which there is widespread agreement is that both have problems. Neither is perfect, and perhaps no license can be perfect. There is also considerable agreement that there are benefits both to software developers and to society as a whole from the choice provided by the existence of a variety of types of free software licenses, including the GPL and BSD-style licenses.

The "Advertising Clause"

The original version of the BSD license contained the so called advertising clause, which stated that all advertising materials that mention features of or use of the software must display the acknowledgment: "This product includes software developed by the University of California, Berkeley and its contributors."

One of the problems with this clause arose from the fact that people who made changes to the source code often wanted to have their names added to the acknowledgment. This could easily result in large and cumbersome acknowledgments for products with numerous contributors and for software distributions consisting of multiple individual projects.

A second problem was legal incompatibility with the terms of the GPL. This is because the GPL prohibits the addition of restrictions beyond those that it already imposes. Thus it was necessary to segregate GPL and BSD-licensed software within projects.

Initially, the "obnoxious BSD advertising clause," as it was referred to by GPL advocates, was used only for the BSD UNIX license. That did not cause any major problems because it was only necessary to include a single sentence of acknowledgment in any advertisement.

However, the fact that other software developers did not copy the clause verbatim, but replaced the phrase "University of California" with the name of their own organization or persons involved in it, resulted in a proliferation of slightly different licenses and a consequently serious problem when many

such programs were assembled to form a larger work or an operating system. For example, if an operating system or other program required fifty slightly different acknowledgment sentences, each naming a different developer or group of developers, suchadvertising alone might require a full page. Not only would this be very tedious reading, but it could also be costly.

In June 1999, after two years of discussion, the Office of Technology Licensing at UCB finally proclaimed: "Effective immediately, licensees and distributors are no longer required to include the acknowledgment within advertising materials. Accordingly, the foregoing paragraph of those BSD Unix files containing it is hereby deleted in its entirety."

This was clearly very useful. However, it could not eliminate the legacy of the advertising clause, as similar clauses still exist in the licenses of many programs that followed the old BSD license; only the developers of such packages can change them.

Examples of BSD-Style Licenses

Below are three examples of BSD-style licenses: (1) the BSD license as it is used by the FreeBSD operating system, (2) a BSD license as it is used bySudo (a free utility program forUnix-like <> operating systems) and (3) a template of a BSD-style license that can be applied to any appropriate project:

(1) The BSD license as it is used by the FreeBSD Unix operating system:

Copyright 1994-2004 The FreeBSD 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.

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

The views and conclusions contained in the software and documentation are those of the authors and should not be interpreted as representing official policies, either expressed or implied, of the FreeBSD Project.

(2) The BSD-style license for Sudo, a small utility that allows designated users to have temporaryroot (i.e., administrative) access to run specified privilegedcommands <>. This software, while released under a BSD-style license, also incorporates other software that had earlier been released under a BSD-style license (referred to below as aUCB license) by UCB. Moreover, it contains a third condition, which restricts the use of the name of the author for endorsements or promotions of products derived from the software, and a fourth condition, which restricts the use of the name of the software on products derived from the software.

Sudo License

Sudo is distributed under the following BSD-style license:

Copyright (c) 1994-1996,1998-2003 Todd C. Miller 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.

- The name of the author may not be used to endorse or promote products derived from this software without specific prior written permission from the author.
- 4. Products derived from this software may not be called "Sudo" nor may "Sudo" appear in their names without specific prior written permission from the author.

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

Sponsored in part by the Defense Advanced Research Projects Agency (DARPA) and Air Force Research Laboratory, Air Force Materiel Command, USAF, under agreement number F39502-99-1-0512.

Additionally, Isearch.c, fnmatch.c, getcwd.c, snprintf.c strcasecmp.c and fnmatch.3 bear the following UCB license:

Copyright (c) 1987, 1989, 1990, 1991, 1993, 1994 The Regents of the University of California. All rights reserved.

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

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

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

(3) A template for a BSD-style license. [YEAR], [COPYRIGHT OWNER] and [LICENSOR] are to be replaced by the actual year of copyright, the owner of the copyright and the licensor. The copyright owner and licensor may be the same, as in the case of the license for FreeBSD (as shown above).

Copyright [YEAR] [COPYRIGHT OWNER]. 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 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 [LICENSOR] "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.

<>

* Disclaimer: The above material is presented for reference purposes only, and it is not intended as nor does it constitute legal advice. Neither Bellevue Linux nor any of its content providers shall be liable for any errors or omissions in the content or for any actions taken in reliance thereupon. The author of said material is not an attorney and makes absolutely no claim to have any knowledge about legal matters beyond that of an informed layman. Any questions should be referred to a licensed attorney specializing in copyrights and intellectual property law. Proper legal advice can only be provided by a licensed attorney with reference to the specific facts of a particular situation and to the laws of the relevant jurisdiction.

Created April 19, 2004. Updated April 22, 2005. Copyright 2004 - 2005 The Linux Information Project. All Rights Reserved.

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

https://spdx.org/licenses/BSD-3-Clause.html

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, 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.

Creative Commons Zero v1.0 Universal

https://spdx.org/licenses/CC0-1.0.html

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.

- 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.

CDDL License (Generic)

https://en.wikipedia.org/wiki/Common_Development_and_Distribution_License

```
Common Development and Distribution License - Wikipedia Jump to content <> Main
menu Main menu move to sidebar hide Navigation
 * Main page <>
* Contents <>
* Current events <>
* Random article <>
* About Wikipedia <>
* Contact us <> Contribute
* Help <>
* Learn to edit <>
* Community portal <>
* Recent changes <>
* Upload file <>
* Special pages <> <> Search <> Search Appearance
* Donate
<a href="https://donate.wikimedia.org/?wmf_source=donate&wmf_medium=sidebar&wmf_campaign=en.wikipedia.org&uselang=en">https://donate.wikimedia.org/?wmf_source=donate&wmf_medium=sidebar&wmf_campaign=en.wikipedia.org&uselang=en</a>
 * Create account <>
* Log in <> Personal tools
* Donate
<a href="https://donate.wikimedia.org/?wmf_source=donate&wmf_medium=sidebar&wmf_campaign=en.wikipedia.org&uselang=en">https://donate.wikimedia.org/?wmf_source=donate&wmf_medium=sidebar&wmf_campaign=en.wikipedia.org&uselang=en</a>
* Create account <>
* Log in <> Pages for logged out editors learn more <>
* Contributions <>
* Talk <>
Contents
move to sidebar hide
 * (Top) <>
* 1 Terms <>
* 2 History <> Toggle History subsection
* 2.1 GPL compatibility <>
* 2.2 cdrtools controversy <>
* 2.3 ZFS in the Linux kernel <>
* 3 Adoption <>
* 4 See also <>
* 5 References <>
* 6 External links <> Toggle the table of contents
Common Development and Distribution License
15 languages
* Catal
<a href="https://ca.wikipedia.org/wiki/Common_Development_and_Distribution_License">https://ca.wikipedia.org/wiki/Common_Development_and_Distribution_License</a>
* Deutsch
<a href="https://de.wikipedia.org/wiki/Common_Development_and_Distribution_License">https://de.wikipedia.org/wiki/Common_Development_and_Distribution_License</a>
* Espaol
<a href="https://es.wikipedia.org/wiki/Common_Development_and_Distribution_License">https://es.wikipedia.org/wiki/Common_Development_and_Distribution_License</a>
<a href="https://fa.wikipedia.org/wiki/">https://fa.wikipedia.org/wiki/</a>
%D9%BE%D8%B1%D9%88%D8%A7%D9%86%D9%87 %D8%AA%D9%88%D8%B3%D8%B9%D9%87 %D9%88 %D8%AA%D9%88
%D8%B2%DB%8C%D8%B9_%D9%85%D8%B4%D8%AA%D8%B1%DA%A9>
* Franais
<a href="https://fr.wikipedia.org/wiki/Common_Development_and_Distribution_License">https://fr.wikipedia.org/wiki/Common_Development_and_Distribution_License</a>
<a href="https://ko.wikipedia.org/wiki/">https://ko.wikipedia.org/wiki/</a>
%EA%B3%B5%EB%8F%99_%EA%B0%9C%EB%B0%9C_%EB%B0%8F_%EB%B0%B0%ED%8F%AC_%ED%97%88%EA%B0%80%E
C%84%9C>
 * Italiano
<a href="https://it.wikipedia.org/wiki/Common_Development_and_Distribution_License">https://it.wikipedia.org/wiki/Common_Development_and_Distribution_License</a>
  <a href="https://ja.wikipedia.org/wiki/Common_Development_and_Distribution_License">https://ja.wikipedia.org/wiki/Common_Development_and_Distribution_License</a>
* Polski
<a href="https://pl.wikipedia.org/wiki/Common_Development_and_Distribution_License">https://pl.wikipedia.org/wiki/Common_Development_and_Distribution_License</a>
* Portugus
<a href="https://pt.wikipedia.org/wiki/Common_Development_and_Distribution_License">https://pt.wikipedia.org/wiki/Common_Development_and_Distribution_License</a>
  <a href="https://ru.wikipedia.org/wiki/CDDL">https://ru.wikipedia.org/wiki/CDDL</a>
* Slovenina
<a href="https://sk.wikipedia.org/wiki/Common_Development_and_Distribution_License">https://sk.wikipedia.org/wiki/Common_Development_and_Distribution_License</a>
 * Svenska
<a href="https://sv.wikipedia.org/wiki/Common_Development_and_Distribution_License">https://sv.wikipedia.org/wiki/Common_Development_and_Distribution_License</a>
<a href="https://uk.wikipedia.org/wiki/%D0%9B%D1%96%D1%86%D0%B5%D0%BD%D0%B7%D1%96%D1%8F_CDDL">https://uk.wikipedia.org/wiki/%D0%9B%D1%96%D1%86%D0%B5%D0%BD%D0%B7%D1%96%D1%8F_CDDL</a>
```

 81>

Edit links

https://www.wikidata.org/wiki/Special:EntityPage/Q304628#sitelinks-wikipedia

- * Article <>
- * Talk <> English
- * Read <>
- * Edit <>
- * View history <> Tools Tools move to sidebar hide Actions
- * Read <>
- * Edit <>
- * View history <> General
- * What links here <>
- * Related changes <>
- * Upload file <>
- * Permanent link <>
- * Page information <>
- * Cite this page <>
- * Get shortened URL <>
- * Download QR code <> Print/export
- * Download as PDF <>
- * Printable version <> In other projects
- * Wikimedia Commons

https://commons.wikimedia.org/wiki/Category:Common_Development_and_Distribution_License

* Wikidata item https://www.wikidata.org/wiki/Special:EntityPage/Q304628

Appearance move to sidebar hide From Wikipedia, the free encyclopedia Free and open-source software license Common Development and Distribution License AuthorSun Microsystems <>, Oracle Corporation <>

Latest version1.1

Publisher <> Oracle Corporation <>

SPDX <> identifierCDDL-1.1

CDDL-1.0

Debian FSG compatible <>Yes

FSF <> approved <>Yes (only 1.0)[1] <>

OSI <> approved <> Yes (only 1.0)[2] <>

GPL compatible <>No[1] <>

Copyleft <>Yes, file-level[1] <>

Linking from code with a different licence <>Yes[1] <>

The Common Development and Distribution License (CDDL) is a free and open-source <> software license <>,[3] <> produced by Sun Microsystems <>, based on theMozilla Public License <> (MPL). Files licensed under the CDDL can be combined with files licensed under other licenses, whether open source or proprietary.[2] <> In 2005 the Open Source Initiative <> approved the license. TheFree Software Foundation <> (FSF) considers it a free software license <>, but one which isincompatible <> with the GNU General Public License <> (GPL).[1]

<>

Terms

[edit <>]

Derived from the Mozilla Public License <> 1.1,[4] <> the CDDL tries to address some of the problems of the MPL.[5] <> Like the MPL, the CDDL is a weak copyleft <> license in-between GPL <> license and BSD <>/MIT <> permissive licenses <>, requiring only source code files under CDDL to remain under CDDL.

Unlike strong copyleft <> licenses like the GPL, mixing of CDDL licensed source code files with source code files under other licenses is permitted without relicensing. The resulting compiled software product ("binary") can be licensed and sold under a different license, as long as the source code is still available under CDDL, which should enable more commercial business cases, according to Sun.[5] <>[6] <>[7] <>

Like the MPL the CDDL includes a patent grant to the licensee from all contributors ("patent peace"). However, in section 2.1(d), the patent grant is lost if the code implementing a patented feature is modified.[8] <>

History

[edit <>

The previous software license <> used by Sun <> for its open source <> projects was theSun Public License <> (SPL), also derived from the Mozilla Public License <>. The CDDL license is considered by Sun <> (now Oracle <>) to beSPL <> version 2.[9] <>

The CDDL was developed by a Sun Microsystems <> team (among them Solaris <> kernel engineer Andrew Tucker[10] <>[11] <> and Claire Giordano[12] <>), based on theMPL <> version 1.1. On December 1, 2004 the CDDL was submitted for approval to theOpen Source Initiative <>[12] <> and was approved as an open source license <> in mid January 2005. The second CDDL proposal, submitted in early January 2005, includes some corrections that prevent the CDDL from being

in conflict with European Copyright law and to allow single developers to use the CDDL for their work.

In 2006, in the first draft of the OSI's license proliferation <> committee report, the CDDL is one of nine preferred licenses listed as popular, widely used, or with strong communities.[13] <>

While the Free Software Foundation <> (FSF) also considered the CDDL a free software <> license, they saw some incompatibilities <> with their GNU General Public License <> (GPL).[1] <>

GPL compatibility

[edit <>]

The question of whether and when both licenses are incompatible <> sparked debates in the free software domain in 2004 to 2006.[14] <> [15] <> For instance, the FSF considered the CDDL incompatible to their GPL license, without going into detail until 2016.[16] <>

CDDL is one of several Open Source Licenses <> which are incompatible with GPL <>. This characteristic was inherited from the MPL 1.1 (fixed with the MPL 2.0 according to the FSF[1] <>) and results from a complex interaction of several clauses;[14] <>[17] <> the root of the problem being GPL virality <>, similar to other cases of GPL incompatibility.[18] <> Some people argue that Sun (or the Sun engineer) as creator of the license made the CDDL intentionally GPL incompatible.[14] <> According to Danese Cooper <> one of the reasons for basing the CDDL on the Mozilla license was that the Mozilla license is GPL-incompatible <>. Cooper stated, at the 6th annual Debian conference <>, that the engineers who had written the Solaris kernel requested that the license of OpenSolaris be GPL-incompatible.[19] <>

Mozilla was selected partially because it is GPL incompatible. That was part of the design when they released OpenSolaris. ... the engineers who wrote Solaris ... had some biases about how it should be released, and you have to respect that.

Simon Phipps <> (Sun's Chief Open Source Officer at the time), who had introduced Cooper as "the one who actually wrote the CDDL",[20] <> did not immediately comment, but later in the same video, he says, referring back to the license issue, "I actually disagree with Danese to some degree",[21] <> while describing the strong preference among the engineers who wrote the code for a BSD-like license, which was in conflict with Sun's preference for somethingcopyleft <>, and that waiting for legal clearance to release some parts of the code under the then unreleased GNU GPL v3 would have taken several years, and would probably also have involved mass resignations from engineers (unhappy with either the delay, the GPL, or boththis is not clear from the video).

Later, in September 2006, Phipps rejected Cooper's assertion in even stronger terms.[22] <> Similarly, Bryan Cantrill <>, who was at Sun at that time and involved in the release of CDDL licensed software stated in 2015 that he and his colleagues expected in 2006 the fast emergence of CDDL licensed software into the Linux ecosystem and the CDDL being not an obstacle.[23] <>

cdrtools controversy

[edit <>]

The GPL compatibility question was also the source of a controversy behind a partial relicensing ofcdrtools <> to the CDDL which had been previously all GPL. In 2006, the Debian <> project declared the cdrtools legally undistributable because the build system <> was licensed under the CDDL.[24] <>

The author, Jrg Schilling, claimed that smake <> is an independent project and does not violate the GPLv3 <>.[25] <> Schilling also argued that even though the GPL requires all scripts required to build the work to be licensed freely, they do not necessarily have to be under the GPL.[26] <>[27] <>[page needed <>] Thus not causing an incompatibility that violates the license <>.

He also argued that in "combined works" (in contrast to "derived works <>") GPL and CDDL licensed code is compatible.[28] <> [29] <>

Red Hat <>'s attorneys have prevented cdrtools from being in Fedora <> or Red Hat Enterprise Linux <>, arguing that Schilling has an "unorthodox" view of copyright law that isn't shared by their legal counsel or the Free Software Foundation.[30] <>

ZFS in the Linux kernel

[edit <>]

In 2015, the CDDL to GPL compatibility question reemerged when Ubuntu <>

announced inclusion of OpenZFS <> by default.[31] <>

In 2016 Ubuntu announced that a legal review resulted in the conclusion that it is legally acceptable to use ZFS as binarykernel module <> in Linux. (As opposed to building it into the kernel image itself.)[32] <>

Others followed Ubuntu's conclusion, for instance James E. J. Bottomley argued there cannot be "a convincing theory of harm" developed, making it impossible to bring the case to court.[33] <>

Eben Moglen <>>, co-author of the GPLv3 <> and founder of the SFLC <>>, argued that while the letter of the GPL might be violated, the spirit of both licenses is unharmed, which would be the relevant aspect in court.[34] <>

The SFLC mentioned also that a precedent exists with the Andrew File System <> 's kernel module, which is not considered a derivative work of the kernel by the kernel developers.[35] <>[36] <>

On the other hand, Bradley M. Kuhn <> and attorney Karen M. Sandler <> from the Software Freedom Conservancy <>[37] <> argued that Ubuntu would violate both licenses, as a binary ZFS module would be a derivative work of the kernel.[38] <> In April 2016, the Ubuntu <> 16.04 LTS <> release included the CDDL-licensed ZFS on Linux <>.[citation needed <>]

Adoption

[edit <>]

Example projects released under CDDL:

- * OpenSolaris <> (including DTrace <>, initially released alone, and ZFS <>)
- * illumos <> (as OpenSolaris OS/Net, continuation project) and illumos distributions <>[39] <>
- * OpenZFS <> multi platform open source volume manager and file system
- * NetBeans <> IDE and RCP
- * GlassFish <>
- * JWSDP <>
- * Project DReaM <>
- * cdrtools <>
- * OpenDJ <>

See also

[edit <>]

- * Free and open-source software portal <>
- * Dual-licensing <>
- * GNAT Modified General Public License <>
- * List of software licenses <>

References

[edit <>]

* ^ a <> b <> c <> d <> e <> f <> g <> "Various Licenses and Comments About"

Them - Common Development and Distribution License"

https://www.gnu.org/licenses/license-list.html#CDDL. Free Software Foundation

. Retrieved2020-10-14.

 * ^ a <> b <> "Can code licensed under the CDDL be combined with code

licensed under other open source licenses?'

https://web.archive.org/web/20091006181308/http://opensolaris.org/os/about/faq/licensing_faq/#CDDL-combo-OpenSolaris FAQ: Common Development and Distribution License (CDDL).

OpenSolaris. Archived from the original

http://www.opensolaris.org/os/about/faq/licensing_faq/#CDDL-combo on 2009-10-06.

* ^ <> Common Development and Distribution License (CDDL) Information https://www.sun.com/cddl/>, archived from the original http://www.sun.com/cddl/> on 2009-03-04, We have drafted a new open source license ...

* ^ <> CDDL_MPL_redline.pdf

https://web.archive.org/web/20060816050912/http://www.sun.com/cddl/CDDL_MPL_redline.pdf on sun.com (archived)

* ^ a <> b <> CDDL Why Summary

https://web.archive.org/web/20050214114513/http://www.sun.com/cddl/CDDL_why_summary.html on sun.com (archived, 2005)

* ^ <> McNealy: CDDL is 'best of both worlds'

https://www.zdnet.com/article/mcnealy-cddl-is-best-of-both-worlds/ on

zdnet.com by Aaron Tan (September 14, 2005)

* ^ <> CDDL

https://tldrlegal.com/license/common-development-and-distribution-license-%28cddl-1.0%29-explained-on-tldrlegal.com

* ^ <> "Common Development and Distribution License 1.0 | Open Source Initiative" https://opensource.org/licenses/CDDL-1.0, opensource.org, 31 October 2006. Retrieved 2020-07-18.

* ^ <> "SPL to CDDL as of NetBeans 5.0 - Why change licenses?"

```
<a href="https://web.archive.org/web/20070224082827/http://www.netbeans.org/about/legal/license-change.html">https://web.archive.org/web/20070224082827/http://www.netbeans.org/about/legal/license-change.html</a>
. NetBeans. Archived fromthe original
<a href="http://www.netbeans.org/about/legal/license-change.html#Why_change_licenses?">http://www.netbeans.org/about/legal/license-change.html#Why_change_licenses?>
on 2007-02-24. Retrieved 2006-12-31. The SPL was based on the Mozilla license -
as CDDL is as well. [..] One way to think of the CDDL is as a cleaned-up
version of the Mozilla license - anyone can reuse it as-is. It's the SPL
version 2.0.
 * ^ <> "Andy Tucker on the CDDL"
<a href="https://alanhargreaves.wordpress.com/2005/04/12/andy-tucker-on-the-cddl/">https://alanhargreaves.wordpress.com/2005/04/12/andy-tucker-on-the-cddl/</a>.
Alan Hargreaves' Blog. 12 April 2005.
  * ^ <> Open source licenses, IP, and CDDL
<a href="https://web.archive.org/web/20061111055302/http://blogs.sun.com/tucker/">https://web.archive.org/web/20061111055302/http://blogs.sun.com/tucker/</a> on
Andrew Tuckers blog, "as one of the drafters of the CDDL I can at least comment
on what the license says, and on our intentions in creating it." (Tuesday April
 * ^ a <> b <> "For Approval: Common Development and Distribution License
(CDDL)" <a href="https://lwn.net/Articles/114840/">
<a href="https
   ^ <> First draft of OSI's license proliferation report
<a href="https://web.archive.org/web/20120205011112/http://www.crynwr.com/cgi-bin/ezmlm-">https://web.archive.org/web/20120205011112/http://www.crynwr.com/cgi-bin/ezmlm-</a>
cgi?3%3Amss%3A11636%3A200607%3Anknhhdligldemhkfbhpd>
. Archived from theoriginal
<a href="http://crynwr.com/cgi-bin/ezmlm-cgi?3:mss:11636:200607:nknhhdligldemhkfbhpd">http://crynwr.com/cgi-bin/ezmlm-cgi?3:mss:11636:200607:nknhhdligldemhkfbhpd</a>
Archived
<a href="https://web.archive.org/web/20140104020911/http://crynwr.com/cgi-bin/ezmlm-cgi?3:mss:11636:200607:nknhhdligldemhkfbhpd">https://web.archive.org/web/20140104020911/http://crynwr.com/cgi-bin/ezmlm-cgi?3:mss:11636:200607:nknhhdligldemhkfbhpd</a>
 2014-01-04 at the Wayback Machine <> on 2012-02-05. Retrieved 2013-01-03.
 * ^ a <> b <> c <> "Sun Proposes New Open-Source License"
<a href="https://archive.today/20150817133221/http://www.eweek.com/c/a/Linux-and-Open-Source/Sun-Proposes-New-OpenSource-License">https://archive.today/20150817133221/http://www.eweek.com/c/a/Linux-and-Open-Source/Sun-Proposes-New-OpenSource-License</a>
. Archived fromthe original
<a href="http://www.eweek.com/c/a/Linux-and-Open-Source/Sun-Proposes-New-OpenSource-Licenses">http://www.eweek.com/c/a/Linux-and-Open-Source/Sun-Proposes-New-OpenSource-Licenses</a>
 on August 17, 2015.
 * ^ <> "The Blog of Ben Rockwood"
<a href="http://cuddletech.com/blog/pivot/entry.php?id=31">http://cuddletech.com/blog/pivot/entry.php?id=31</a>.
 * ^ <> "Interpreting, enforcing and changing the GNU GPL, as applied to
combining Linux and ZFS" <a href="https://www.fsf.org/licensing/zfs-and-linux">https://www.fsf.org/licensing/zfs-and-linux</a>. Free
Software Foundation. April 11, 2016. Retrieved 2017-07-27.
  * ^ <> "MPL / GPL Incompatibility"
<a href="http://www.tomhull.com/ocston/docs/mozgpl.html">http://www.tomhull.com/ocston/docs/mozgpl.html</a>. Retrieved 2007-12-03.
 * ^ <> chandan (2006-09-18). "Copyrights, Licenses and CDDL Illustrated"
<a href="https://web.archive.org/web/20150529114715/https://blogs.oracle.com/chandan/entry/copyrights_licenses_and_cddl_illustrated">https://web.archive.org/web/20150529114715/https://blogs.oracle.com/chandan/entry/copyrights_licenses_and_cddl_illustrated</a>
. blogs.oracle.com. Archived fromthe original
<a href="https://blogs.oracle.com/chandan/entry/copyrights_licenses_and_cddl_illustrated">https://blogs.oracle.com/chandan/entry/copyrights_licenses_and_cddl_illustrated</a>
 on 2015-05-29. Retrieved 2015-05-29. A common misconception is about CDDL and
GPL incompatibility. (Incompatibility in the sense: to combine two source
files, one under GPL and another under CDDL, to create a common executable.)
GPL is incompatible with most licenses like Mozilla Public License, Apache, and
CDDL. GPL wants you erase those licenses and use GPL in that place, where as
these licenses do not permit erasing them. Hence the incompatibility deadlock.
 * ^ <> Danese Cooper (2006). OpenSolaris and CDDL discussion at Debconf 2006
<a href="http://meetings-archive.debian.net/pub/debian-meetings/2006/debconf6/theora-small/2006-05-14/tower/OpenSolaris_Java_and_Debian-meetings/2006/debconf6/theora-small/2006-05-14/tower/OpenSolaris_Java_and_Debian-meetings/2006/debconf6/theora-small/2006-05-14/tower/OpenSolaris_Java_and_Debian-meetings/2006/debconf6/theora-small/2006-05-14/tower/OpenSolaris_Java_and_Debian-meetings/2006/debconf6/theora-small/2006-05-14/tower/OpenSolaris_Java_and_Debian-meetings/2006/debconf6/theora-small/2006-05-14/tower/OpenSolaris_Java_and_Debian-meetings/2006/debconf6/theora-small/2006-05-14/tower/OpenSolaris_Java_and_Debian-meetings/2006/debconf6/theora-small/2006-05-14/tower/OpenSolaris_Debian-meetings/2006/debconf6/theora-small/2006-05-14/tower/OpenSolaris_Debian-meetings/2006/debconf6/theora-small/2006-05-14/tower/OpenSolaris_Debian-meetings/2006/debconf6/theora-small/2006-05-14/tower/OpenSolaris_Debian-meetings/2006/debconf6/theora-small/2006-05-14/tower/OpenSolaris_Debian-meetings/2006/debconf6/theora-small/2006-05-14/tower/OpenSolaris_Debian-meetings/2006-05-14/tower/OpenSolaris_Debian-meetings/2006-05-14/tower/OpenSolaris_Debian-meetings/2006-05-14/tower/OpenSolaris_Debian-meetings/2006-05-14/tower/OpenSolaris_Debian-meetings/2006-05-14/tower/OpenSolaris_Debian-meetings/2006-05-14/tower/OpenSolaris_Debian-meetings/2006-05-14/tower/OpenSolaris_Debian-meetings/2006-05-14/tower/OpenSolaris_Debian-meetings/2006-05-14/tower/OpenSolaris_Debian-meetings/2006-05-14/tower/OpenSolaris_Debian-meetings/2006-05-14/tower/OpenSolaris_Debian-meetings/2006-05-14/tower/OpenSolaris_Debian-meetings/2006-05-14/tower/OpenSolaris_Debian-meetings/2006-05-14/tower/OpenSolaris_Debian-meetings/2006-05-14/tower/OpenSolaris_Debian-meetings/2006-05-14/tower/OpenSolaris_Debian-meetings/2006-05-14/tower/OpenSolaris_Debian-meetings/2006-05-14/tower/OpenSolaris_Debian-meetings/2006-05-14/tower/OpenSolaris_Debian-meetings/2006-05-14/tower/OpenSolaris_Debian-meetings/2006-05-14/tower/OpenSolaris_Debian-meetings/2006-05-05-05-05-05-05-05-05-05-05-05-
Simon_Phipps__Alvaro_Lopez_Ortega.ogg>
(Ogg Theora <>). Event occurs at 27:26. Mozilla was selected partially because
it is GPL incompatible. That was part of the design when they released
OpenSolaris. ... the engineers who wrote Solaris ... had some biases about how
it should be released, and you have to respect that (alternate URL
<a href="https://web.archive.org/web/20110722120048/http://caesar.acc.umu.se/pub/debian-meetings/2006/debconf6/theora-small/">https://web.archive.org/web/20110722120048/http://caesar.acc.umu.se/pub/debian-meetings/2006/debconf6/theora-small/</a>
2006-05-14/tower/OpenSolaris_Java_and_Debian-Simon_Phipps__Alvaro_Lopez_Ortega.ogg>
, see 27:27 through 28:24)

* ^ <> Simon Phipps (2006). OpenSolaris and CDDL discussion at Debconf 2006
<a href="http://meetings-archive.debian.net/pub/debian-meetings/2006/debconf6/theora-small/2006-05-14/tower/OpenSolaris_Java_and_Debian-meetings/2006/debconf6/theora-small/2006-05-14/tower/OpenSolaris_Java_and_Debian-meetings/2006/debconf6/theora-small/2006-05-14/tower/OpenSolaris_Java_and_Debian-meetings/2006/debconf6/theora-small/2006-05-14/tower/OpenSolaris_Java_and_Debian-meetings/2006/debconf6/theora-small/2006-05-14/tower/OpenSolaris_Java_and_Debian-meetings/2006/debconf6/theora-small/2006-05-14/tower/OpenSolaris_Java_and_Debian-meetings/2006/debconf6/theora-small/2006-05-14/tower/OpenSolaris_Java_and_Debian-meetings/2006/debconf6/theora-small/2006-05-14/tower/OpenSolaris_Debian-meetings/2006/debconf6/theora-small/2006-05-14/tower/OpenSolaris_Debian-meetings/2006/debconf6/theora-small/2006-05-14/tower/OpenSolaris_Debian-meetings/2006/debconf6/theora-small/2006-05-14/tower/OpenSolaris_Debian-meetings/2006/debconf6/theora-small/2006-05-14/tower/OpenSolaris_Debian-meetings/2006/debconf6/theora-small/2006-05-14/tower/OpenSolaris_Debian-meetings/2006-05-14/tower/OpenSolaris_Debian-meetings/2006-05-14/tower/OpenSolaris_Debian-meetings/2006-05-14/tower/OpenSolaris_Debian-meetings/2006-05-14/tower/OpenSolaris_Debian-meetings/2006-05-14/tower/OpenSolaris_Debian-meetings/2006-05-14/tower/OpenSolaris_Debian-meetings/2006-05-14/tower/OpenSolaris_Debian-meetings/2006-05-14/tower/OpenSolaris_Debian-meetings/2006-05-14/tower/OpenSolaris_Debian-meetings/2006-05-14/tower/OpenSolaris_Debian-meetings/2006-05-14/tower/OpenSolaris_Debian-meetings/2006-05-14/tower/OpenSolaris_Debian-meetings/2006-05-14/tower/OpenSolaris_Debian-meetings/2006-05-14/tower/OpenSolaris_Debian-meetings/2006-05-14/tower/OpenSolaris_Debian-meetings/2006-05-14/tower/OpenSolaris_Debian-meetings/2006-05-14/tower/OpenSolaris_Debian-meetings/2006-05-14/tower/OpenSolaris_Debian-meetings/2006-05-14/tower/OpenSolaris_Debian-meetings/2006-05-14/tower/OpenSolaris_Debian-meetings/2006-05-14/tower/OpenSolaris_Debian-meetings/2006-05-05-05-05-05-05-05-05-05-05-05-
Simon_Phipps__Alvaro_Lopez_Ortega.ogg>
(Ogg Theora <>). Debconf <> 2006. Event occurs at 13:00. ...we have got Danese
Cooper in the room, and she is the one who actually wrote the CDDL...
  * ^ <> Simon Phipps (2006). OpenSolaris and CDDL discussion at Debconf 2006
Simon_Phipps__Alvaro_Lopez_Ortega.ogg>
(Ogg Theora <>). Event occurs at 36:00. I actually disagree with Danese to some
degree..
  * ^ <> Phipps, Simon (2006-09-04). "Re: Danese Cooper claims CDDL made
incompatible with GPL on purpose"
<a href="https://marc.info/?l=opensolaris-discuss&m=115740406507420">https://marc.info/?l=opensolaris-discuss&m=115740406507420>.</a>
OpenSolaris-Discuss List. Retrieved 2019-03-07. Nonetheless she is wrong to
characterise the opinion of the Solaris engineering team in the way she does.
She is speaking this way because she lost an argument inside Sun, not because
her view is representative of the views of Sun or its staff in the way she
claims. She, along with many actual engineers, was an advocate of using GPL for
OpenSolaris but the need to release rather than wait for one of {GPL v3,
Mozilla license revision, encumbrance removal) meant that this was not
```

possible. I am still furious with her for the statement she made at DebConf, which was spiteful and an obstacle to a united FOSS movement. * ^ <> Bryan Cantrill <> (2015-04-06). "I am the CTO of Joyent, the father of DTrace and an OS kernel developer for 20 years. AMA! https://www.reddit.com/r/IAmA/comments/31ny87/i_am_the_cto_of_joyent_the_father_of_dtrace_and/cq3bs9z?context=3> .reddit.com <>. Retrieved 2016-03-11. Question: Was the CDDL designed to prevent Sun technologies from entering Linux? - BC: Great question, and the answer was that we didn't know -- but the expectation was that it would be ported to Linux relatively quickly. I remember vividly standing over a terminal with a bunch of people as we actually launched OpenSolaris (like, clicked carriage return on making the DTrace code live -- which was the first in the chute), and the Sun Legal guy and I were chatting. We were both wondering if DTrace was going to show up in Linux in a month or if it would take two years. But that was the range of guesses: neither of us believed that the Linux community themselves would hold up CDDL as an obstacle, and certainly if you told me that a decade later, DTrace wouldn't be in Linux because of licensingFUD <>, I wouldn't have believed you. Of course, in hindsight, it all seems so clear:NIH <> is enormously powerful, and we were fools for discounting it. * ^ <> "cdrtools - a tale of two licenses [LWN.net]" https://lwn.net/Articles/195167/>. lwn.net. Retrieved 2020-07-18. ' ^ <> "Cdrtools (Cdrecord) release information" http://cdrtools.sourceforge.net/private/cdrecord.html. cdrtools.sourceforge.net. Retrieved 2020-07-18. * ^ <> "The GNU General Public License" https://www.gnu.org/licenses/gpl.html. Retrieved 2009-10-24. * ^ <> "Die GPL kommentiert und erklrt Online-Version" https://web.archive.org/web/20150908033333/http://www.oreilly.de/german/freebooks/gplger/ (in German), O'Reilly, Archived from the original http://www.oreilly.de/german/freebooks/gplger on 2015-09-08. Retrieved 2010-11-17. * ^ <> "Neuer Streit um cdrtools" http://www.pro-linux.de/news/1/10155/neuer-streit-um-cdrtools.html. Pro-Linux (in German). Laut Aussagen von Jrg Schilling sind die Lizenzen durchaus miteinander kompatibel. Die Regeln werden oftmals falsch ausgelegt. Die Aussagen der FSF-Verantwortlichen seien oft widersprchlich und in sich nicht schlssig. * ^ <> "OSSCC GPL" <http://www.osscc.net/en/gpl.html>. * ^ <> "Forbidden items - Fedora Project Wiki" https://fedoraproject.org/wiki/Forbidden_items#cdrtools. fedoraproject.org. Retrieved2020-07-18. * ^ <> Michael Larabel <> (6 October 2015). "Ubuntu Is Planning To Make The ZFS File-System A "Standard" Offering" https://www.phoronix.com/scan.php?page=news_item&px=Ubuntu-ZFS-Standard-Plans>. * ^ <> Dustin Kirkland (18 February 2016). "ZFS Licensing and Linux" https://insights.ubuntu.com/2016/02/18/zfs-licensing-and-linux/. Ubuntu Insights. Canonical. * ^ <> Are GPLv2 and CDDL incompatible? http://blog.hansenpartnership.com/are-gplv2-and-cddl-incompatible/ on hansenpartnership.com by James E. J. Bottomley, "What the above analysis shows is that even though we presumed combination of GPLv2 and CDDL works to be a technical violation, there's no way actually to prosecute such a violation because we cant develop a convincing theory of harm resulting. Because this makes it impossible to take the case to court, effectively it must be concluded that the combination of GPLv2 and CDDL, provided youre following a GPLv2 compliance regime for all the code, is allowable." (23 February 2016) * ^ <> Moglen, Eben <>; Choudhary, Mishi (26 February 2016). "The Linux Kernel, CDDL and Related Issues" https://softwarefreedom.org/resources/2016/linux-kernel-cddl.html. * ^ <> Moglen, Eben <>; Choudhary, Mishi (26 February 2016). "The Linux Kernel, CDDL and Related Issues" https://softwarefreedom.org/resources/2016/linux-kernel-cddl.html. Historically, there's been things like the original Andrew filesystem module: a standard filesystem that really wasn't written for Linux in the first place, and just implements a UNIX filesystem. Is that derived just because it got ported to Linux that had a reasonably similar VFS interface to what other UNIXes did? ... Personally, I think that case wasn't a derived work, and I was willing to tell the AFS guys so. * ^ <> Copying https://git.kernel.org/cgit/linux/kernel/git/torvalds/linux.git/tree/COPYING on git.kernel.org "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". * ^ <> Software Freedom Law Center Appoints Two New Attorneys to Defend and Support Free and Open Source Software

http://www.softwarefreedom.org/news/2005/oct/31/new-attorneys/ (October 31,

2005)

```
* ^ <> GPL Violations Related to Combining ZFS and Linux
<a href="https://sfconservancy.org/blog/2016/feb/25/zfs-and-linux/">https://sfconservancy.org/blog/2016/feb/25/zfs-and-linux/</a> on
sfconservancy.org byBradley M. Kuhn <> and Karen M. Sandler <>, "Conservancy
(as a Linux copyright holder ourselves), along with the members of our
coalition in the GPL Compliance Project for Linux Developers, all agree that
Canonical and others infringe Linux copyrights when they distribute zfs.ko."
* ^ <> "illumos Distributions"
<a href="https://wiki.illumos.org/display/illumos/Distributions">https://wiki.illumos.org/display/illumos/Distributions</a>. The illumos Family.
illumos. 20 March 2017.
External links
[edit <>]
 * Common Development and Distribution License (CDDL) Information
<a href="https://web.archive.org/web/20090304142159/http://www.sun.com/cddl/">https://web.archive.org/web/20090304142159/http://www.sun.com/cddl/</a>, archived
from the original <a href="http://www.sun.com/cddl/">http://www.sun.com/cddl/</a> on 2009-03-04
 * "CDDL 1.0 copy at opensource.org" <a href="http://opensource.org/licenses/CDDL-1.0">http://opensource.org/licenses/CDDL-1.0</a>
. 31 October 2006. Retrieved 9 April 2013.
* Redline diffs between MPL1.1 and CDDL
<a href="https://web.archive.org/web/20090304142159/http://www.sun.com/cddl/CDDL_MPL_redline.pdf">https://web.archive.org/web/20090304142159/http://www.sun.com/cddl/CDDL_MPL_redline.pdf</a>
(PDF), p. 9, archived from the original
<a href="http://www.sun.com/cddl/CDDL">http://www.sun.com/cddl/CDDL</a> MPL redline.pdf> (PDF) on 2009-03-04
* Summary description of changes
<a href="https://web.archive.org/web/20090304142159/http://www.sun.com/cddl/CDDL_why_summary.html">https://www.sun.com/cddl/CDDL_why_summary.html</a>
, archived fromthe original <a href="http://www.sun.com/cddl/CDDL_why_summary.html">http://www.sun.com/cddl/CDDL_why_summary.html</a> on
2009-03-04
* Detailed description of changes
<a href="https://web.archive.org/web/20090304142159/http://www.sun.com/cddl/CDDL_why_details.html">https://web.archive.org/web/20090304142159/http://www.sun.com/cddl/CDDL_why_details.html</a>
, archived fromthe original <a href="http://www.sun.com/cddl/CDDL_why_details.html">http://www.sun.com/cddl/CDDL_why_details.html</a> on
2009-03-04
* FAQ on CDDL on Open Solaris Site
<a href="https://web.archive.org/web/20071027082141/http://www.opensolaris.org/os/about/faq/licensing_faq/">https://web.archive.org/web/20071027082141/http://www.opensolaris.org/os/about/faq/licensing_faq/</a>
* Copyrights, Licenses and CDDL Illustrated
<a href="https://web.archive.org/web/20150529114715/https://blogs.oracle.com/chandan/entry/copyrights_licenses_and_cddl_illustrated">https://web.archive.org/web/20150529114715/https://blogs.oracle.com/chandan/entry/copyrights_licenses_and_cddl_illustrated</a>
on oracle.com (2006)
* The Common Development and Distribution License
<a href="https://lwn.net/Articles/114839/">https://lwn.net/Articles/114839/</a>, Linux Weekly News <> Editorial (December 8,
2004)
* CDDL Analysis from a DFSG perspective, and Opinion Piece
<a href="http://soundadvice.id.au/blog/2005/02/04/#cddl">http://soundadvice.id.au/blog/2005/02/04/#cddl</a> (2005)
* V <>
* t <>
* e <>Sun Microsystems <>
Acquired by Oracle <>
Hardware
Systems
 * Sun-1 <>
* Sun-2 <>
* Sun-3 <>
* Sun386i <>
* Sun-4 <>
* SPARCstation <>servercenter
* 1 <>
* 2 <>
* 4 <>
* 5 <>
* 10 <>
* 20 <>
* classic <>
* IPC <>
* IPX <>
* LX <>
* ZX <>
* Netra <>
* Ultra <>
* 1 <>
* 2 <>
* 5 <>
* 10 <>
* 24 <>
* 30 <>
* 60 <>
* 80 <>
* Enterprise <>
* 10000 <>
* Blade server <>
* Blade workstation <>
```

* Fire <>

- * 12K <>
- * 15K <>
- * E25K <>
- * T2000 <>
- * X4500 <>
- * SPARC Enterprise <>
- * JavaStation <>
- * Java Workstation <>
- * Ray <>
- * Cobalt Qube <>
- * Cobalt RaQ <>

Processors

- * SPARC <>
- * MB86900 <>
- * microSPARC <>
- * SuperSPARC <>
- * UltraSPARC <>
- * UltraSPARC II <>
- * UltraSPARC IIe
- * UltraSPARC IIi
- * Gemini
- * UltraSPARC III <>
- * UltraSPARC III Cu
- * UltraSPARC IIIi
- * UltraSPARC IV <>
- * UltraSPARC T1 <>
- * UltraSPARC T2 <>
- * SPARC T3 <>
- * SPARC T4 <>
- * SPARC T5 <>
- * Rock <>
- * MAJC <>
- * Sun4d <>
- * SBus <>
- * Fireplane <>
- * LOM port <>
- * MBus <>
- * Modular Datacenter <>
- * Neptune <>
- * System Service Processor <>
- * SPARC T series <>
- * SPOT <>
- * Ultra Port Architecture <>
- * Visual Instruction Set <> <>

Software

- * TOPS <>
- * SunOS <>
- * Solaris <>
- * NIS <>
- * NIS+ <>
- * NFS <>
- * ZFS <>
- * ZFS+ <>
- * SunView <>
- * NeWS <>
- * OpenWindows <>
- * Java Desktop System <>
- * Studio <>
- * Java <>
- * StarOffice <>
- * iPlanet <>
- * Java System <>
- * Sun Secure Global Desktop <>
- * MySQL <>
- * xVM <>
- * GlassFish <>
- * VirtualBox <>

Storage

- * StorageTek 5800 System <>
- * StorageTek SL8500 <>
- * Open Storage <>
- * QFS <>
- * ZFS <>

Performance

- * Cloud <>
- * Constellation System <>

* Visualization System <> * Grid Engine <> * Lustre <> Research * Sun Microsystems Laboratories <> * picoJava <> * Fortress <> * Project Looking Glass <> Education * BlueJ <> * Global Education & Learning Community <> * SCPs <> Acquisitions * Afara Websystems <> * Cobalt Networks <> * Gridware <> * Lighthouse Design <> * Montalvo Systems <> * MySQL AB <> * Pixo <> * Procom Technology <> * SavaJe <> * StorageTek <> * Tarantella <> Slogans * The Network is the Computer <> * Write once, run anywhere <> Community * Common Development and Distribution License <> * Java Community Process <> * NetBeans <> * OpenOffice.org <> * OpenSolaris <> * OpenSPARC <> * OpenJDK <> * Open Source University Meetup <> People <> * Bill Joy <> * Andy Bechtolsheim <> * Scott McNealy <> * Vinod Khosla <> Category <> Retrieved from " https://en.wikipedia.org/w/index.php?title=Common_Development_and_Distribution_License&oldid=1300798559 https://en.wikipedia.org/w/index.php?title=Common_Development_and_Distribution_License&oldid=1300798559 " Categories <>: * Free and open-source software licenses <> * Copyleft <> * Sun Microsystems <> * Software using Common Development and Distribution License <> Hidden categories: * Webarchive template wayback links <> * CS1 German-language sources (de) <> * Articles with short description <> * Short description is different from Wikidata <> * Wikipedia articles needing page number citations from February 2016 <> * All articles with unsourced statements <> * Articles with unsourced statements from July 2025 <> * This page was last edited on 16 July 2025, at 13:20 (UTC). * Text is available under the Creative Commons Attribution-ShareAlike 4.0 License <>; additional terms may apply. By using this site, you agree to the Terms of Use

https://foundation.wikimedia.org/wiki/Special:MyLanguage/Policy:Terms_of_Use

https://foundation.wikimedia.org/wiki/Special:MyLanguage/Policy:Privacy_policy>

https://foundation.wikimedia.org/wiki/Special:MyLanguage/Policy:Privacy_policy>

https://foundation.wikimedia.org/wiki/Special:MyLanguage/Policy:Universal_Code_of_Conduct

. Wikipedia is a registered trademark of the Wikimedia Foundation, Inc. https://wikimediafoundation.org/, a non-profit organization.

* Developers https://developer.wikimedia.org

* Statistics https://stats.wikimedia.org/#/en.wikipedia.org

andPrivacy Policy

* Privacy policy

* About Wikipedia <>
* Disclaimers <>
* Contact Wikipedia <>
* Code of Conduct

* Cookie statement

- ^ Cookie statement
 <https://foundation.wikimedia.org/wiki/Special:MyLanguage/Policy:Cookie_statement>
 * Mobile view <>
 * <https://www.wikimedia.org/>
 * <https://www.mediawiki.org/> Search Search Toggle the table of contents
 Common Development and Distribution License <> <> <> <> <> <> > <> 15
 languages Add topic <>

Common Development and Distribution License 1.0

https://spdx.org/licenses/CDDL-1.0.html

COMMON DEVELOPMENT AND DISTRIBUTION LICENSE (CDDL) Version 1.0

- 1. Definitions.
- 1.1. Contributor means each individual or entity that creates or contributes to the creation of Modifications.
- 1.2. Contributor Version means the combination of the Original Software, prior Modifications used by a Contributor (if any), and the Modifications made by that particular Contributor.
- 1.3. Covered Software means (a) the Original Software, or (b) Modifications, or (c) the combination of files containing Original Software with files containing Modifications, in each case including portions thereof.
- 1.4. Executable means the Covered Software in any form other than Source Code.
- 1.5. Initial Developer means the individual or entity that first makes Original Software available under this License.
- 1.6. Larger Work means a work which combines Covered Software or portions thereof with code not governed by the terms of this License.
- 1.7. License means this document.
- 1.8. Licensable means having the right to grant, to the maximum extent possible, whether at the time of the initial grant or subsequently acquired, any and all of the rights conveyed herein.
- 1.9. Modifications means the Source Code and Executable form of any of the following:
- A. Any file that results from an addition to, deletion from or modification of the contents of a file containing Original Software or previous Modifications:
 - B. Any new file that contains any part of the Original Software or previous Modification; or
 - C. Any new file that is contributed or otherwise made available under the terms of this License.
- 1.10. Original Software means the Source Code and Executable form of computer software code that is originally released under this License.
- 1.11. Patent Claims means any patent claim(s), now owned or hereafter acquired, including without limitation, method, process, and apparatus claims, in any patent Licensable by grantor.
- 1.12. Source Code means (a) the common form of computer software code in which modifications are made and (b) associated documentation included in or with such code.
- 1.13. You (or Your) means an individual or a legal entity exercising rights under, and complying with all of the terms of, this License. For legal entities, You includes any entity which controls, is controlled by, or is under common control with You. For purposes of this definition, control means (a) the power, direct or indirect, to cause the direction or management of such entity, whether by contract or otherwise, or (b) ownership of more than fifty percent (50%) of the outstanding shares or beneficial ownership of such entity.
- 2. License Grants.
- 2.1. The Initial Developer Grant.

Conditioned upon Your compliance with Section 3.1 below and subject to third party intellectual property claims, the Initial Developer hereby grants You a world-wide, royalty-free, non-exclusive license:

- (a) under intellectual property rights (other than patent or trademark) Licensable by Initial Developer, to use, reproduce, modify, display, perform, sublicense and distribute the Original Software (or portions thereof), with or without Modifications, and/or as part of a Larger Work; and
- (b) under Patent Claims infringed by the making, using or selling of Original Software, to make, have made, use, practice, sell, and offer for sale, and/or otherwise dispose of the Original Software (or portions thereof).
- (c) The licenses granted in Sections 2.1(a) and (b) are effective on the date Initial Developer first distributes or otherwise makes the Original Software available to a third party under the terms of this License.
- (d) Notwithstanding Section 2.1(b) above, no patent license is granted: (1) for code that You delete from the Original Software, or (2) for infringements caused by: (i) the modification of the Original Software, or (ii) the combination of the Original Software with other software or devices.
- 2.2. Contributor Grant.

Conditioned upon Your compliance with Section 3.1 below and subject to third party intellectual property claims, each Contributor hereby grants You a world-wide, royalty-free, non-exclusive license:

- (a) under intellectual property rights (other than patent or trademark) Licensable by Contributor to use, reproduce, modify, display, perform, sublicense and distribute the Modifications created by such Contributor (or portions thereof), either on an unmodified basis, with other Modifications, as Covered Software and/or as part of a Larger Work; and
- (b) under Patent Claims infringed by the making, using, or selling of Modifications made by that Contributor either alone and/or in combination with its Contributor Version (or portions of such combination), to make, use, sell, offer for sale, have made, and/or otherwise dispose of: (1) Modifications made by that Contributor (or portions thereof); and (2) the combination of Modifications made by that Contributor with its Contributor Version (or portions of such combination).
- (c) The licenses granted in Sections 2.2(a) and 2.2(b) are effective on the date Contributor first distributes or otherwise makes the Modifications available to a third party.
- (d) Notwithstanding Section 2.2(b) above, no patent license is granted: (1) for any code that Contributor has deleted from the Contributor Version; (2) for infringements caused by: (i) third party modifications of Contributor Version, or (ii) the combination of Modifications made by that Contributor with other software (except as part of the Contributor Version) or other devices; or (3) under Patent Claims infringed by Covered Software in the absence of Modifications made by that Contributor.

3. Distribution Obligations.

3.1. Availability of Source Code.

Any Covered Software that You distribute or otherwise make available in Executable form must also be made available in Source Code form and that Source Code form must be distributed only under the terms of this License. You must include a copy of this License with every copy of the Source Code form of the Covered Software You distribute or otherwise make available. You must inform recipients of any such Covered Software in Executable form as to how they can obtain such Covered Software in Source Code form in a reasonable manner on or through a medium customarily used for software exchange.

3.2. Modifications.

The Modifications that You create or to which You contribute are governed by the terms of this License. You represent that You believe Your Modifications are Your original creation(s) and/or You have sufficient rights to grant the rights conveyed by this License.

3.3. Required Notices.

You must include a notice in each of Your Modifications that identifies You as the Contributor of the Modification. You may not remove or alter any copyright, patent or trademark notices contained within the Covered Software, or any notices of licensing or any descriptive text giving attribution to any Contributor or the Initial Developer.

3.4. Application of Additional Terms.

You may not offer or impose any terms on any Covered Software in Source Code form that alters or restricts the applicable version of this License or the recipients rights hereunder. You may choose to offer, and to charge a fee for, warranty, support, indemnity or liability obligations to one or more recipients of Covered Software. However, you may do so only on Your own behalf, and not on behalf of the Initial Developer or any Contributor. You must make it absolutely clear that any such warranty, support, indemnity or liability obligation is offered by You alone, and You hereby agree to indemnify the Initial Developer and every Contributor for any liability incurred by the Initial Developer or such Contributor as a result of warranty, support, indemnity or liability terms You offer.

3.5. Distribution of Executable Versions.

You may distribute the Executable form of the Covered Software under the terms of this License or under the terms of a license of Your choice, which may contain terms different from this License, provided that You are in compliance with the terms of this License and that the license for the Executable form does not attempt to limit or alter the recipients rights in the Source Code form from the rights set forth in this License. If You distribute the Covered Software in Executable form under a different license, You must make it absolutely clear that any terms which differ from this License are offered by You alone, not by the Initial Developer or Contributor. You hereby agree to indemnify the Initial Developer and every Contributor for any liability incurred by the Initial Developer or such Contributor as a result of any such terms You offer.

3.6. Larger Works.

You may create a Larger Work by combining Covered Software with other code not governed by the terms of this License and distribute the Larger Work as a single product. In such a case, You must make sure the requirements of this License are fulfilled for the Covered Software.

4. Versions of the License.

4.1. New Versions.

Sun Microsystems, Inc. is the initial license steward and may publish revised and/or new versions of this License from time to time. Each version will be given a distinguishing version number. Except as provided in Section 4.3, no one other than the license steward has the right to modify this License.

4.2. Effect of New Versions.

You may always continue to use, distribute or otherwise make the Covered Software available under the terms of the version of the License under which You originally received the Covered Software. If the Initial Developer includes a notice in the Original Software prohibiting it from being distributed or otherwise made available under any subsequent version of the License, You must distribute and make the Covered Software available under the terms of the version of the License under which You originally received the Covered Software. Otherwise, You may also choose to use, distribute or otherwise make the Covered Software available under the terms of any subsequent version of the License published by the license steward.

4.3. Modified Versions.

When You are an Initial Developer and You want to create a new license for Your Original Software, You may create and use a modified version of this License if You: (a) rename the license and remove any references to the name of the license steward (except to note that the license differs from this License); and (b) otherwise make it clear that the license contains terms which differ from this License.

5. DISCLAIMER OF WARRANTY.

COVERED SOFTWARE IS PROVIDED UNDER THIS LICENSE ON AN AS IS BASIS, WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, WITHOUT LIMITATION, WARRANTIES THAT THE COVERED SOFTWARE IS FREE OF DEFECTS, 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 PARTYS NEGLIGENCE TO THE EXTENT APPLICABLE LAW PROHIBITS SUCH LIMITATION. SOME JURISDICTIONS DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THIS EXCLUSION AND LIMITATION MAY NOT APPLY TO YOU.

8. U.S. GOVERNMENT END USERS.

The Covered Software is a commercial item, as that term is defined in 48 C.F.R. 2.101 (Oct. 1995), consisting of commercial computer software (as that term is defined at 48 C.F.R. 252.227-7014(a)(1)) and commercial computer software documentation as such terms are used in 48 C.F.R. 12.212 (Sept. 1995). Consistent with 48 C.F.R. 12.212 and 48 C.F.R. 227.7202-1 through 227.7202-4 (June 1995), all U. S. Government End Users acquire Covered Software with only those rights set forth herein. This U.S. Government Rights clause is in lieu of, and supersedes, any other FAR, DFAR, or other clause or provision that addresses Government rights in computer software under this License.

9. MISCELLANEOUS.

This License represents the complete agreement concerning subject matter hereof. If any provision of this License is held to be unenforceable, such provision shall be reformed only to the extent necessary to make it enforceable. This License shall be governed by the law of the jurisdiction specified in a notice contained within the Original Software (except to the extent applicable law, if any, provides otherwise), excluding such jurisdictions conflict-of-law provisions. Any litigation relating to this License shall be subject to the jurisdiction of the courts located in the jurisdiction and venue specified in a notice contained within the Original Software, with the losing party responsible for costs, including, without limitation, court costs and reasonable attorneys fees and expenses. The application of the United Nations Convention on Contracts for the International Sale of Goods is expressly excluded. Any law or regulation which provides that the language of a contract shall be construed against the drafter shall not apply to this License. You agree that You alone are responsible for compliance with the United States export administration regulations (and the export control laws and regulation of any other countries) when You use, distribute or otherwise make available any Covered Software.

10. RESPONSIBILITY FOR CLAIMS.

As between Initial Developer and the Contributors, each party is responsible for claims and damages arising, directly or indirectly, out of its utilization of rights under this License and You agree to work with Initial Developer and Contributors to distribute such responsibility on an equitable basis. Nothing herein is intended or shall be deemed to constitute any admission of liability.

Common Development and Distribution License 1.1

https://spdx.org/licenses/CDDL-1.1.html

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.

GNU General Public License v2.0 only

https://spdx.org/licenses/GPL-2.0-only.html

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

GNU Lesser General Public License v2.1 only

https://spdx.org/licenses/LGPL-2.1-only.html

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.

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 Lesser General Public License v3.0 only

https://spdx.org/licenses/LGPL-3.0-only.html

GNU LESSER GENERAL PUBLIC LICENSE

Version 3, 29 June 2007

Copyright (C) 2007 Free Software Foundation, Inc. http://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.

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. http://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 http://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 http://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 http://www.gnu.org/philosophy/why-not-lgpl.html.

MIT License

https://spdx.org/licenses/MIT.html

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 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.

PROPRIETARY (Generic)

https://en.wikipedia.org/wiki/Proprietary_software

```
Proprietary software - Wikipedia Jump to content <> Main menu Main menu move to
sidebar hide Navigation
* Main page <>
* Contents <>
* Current events <>
* Random article <>
* About Wikipedia <>
* Contact us <> Contribute
* Help <>
* Learn to edit <>
* Community portal <>
* Recent changes <>
* Upload file <>
* Special pages <> <> Search <> Search Appearance
* Donate
<a href="https://donate.wikimedia.org/?wmf_source=donate&wmf_medium=sidebar&wmf_campaign=en.wikipedia.org&uselang=en">https://donate.wikimedia.org/?wmf_source=donate&wmf_medium=sidebar&wmf_campaign=en.wikipedia.org&uselang=en</a>
 * Create account <>
* Log in <> Personal tools
* Donate
<a href="https://donate.wikimedia.org/?wmf_source=donate&wmf_medium=sidebar&wmf_campaign=en.wikipedia.org&uselang=en">https://donate.wikimedia.org/?wmf_source=donate&wmf_medium=sidebar&wmf_campaign=en.wikipedia.org&uselang=en</a>
* Create account <>
* Log in <> Pages for logged out editors learn more <>
* Contributions <>
* Talk <>
Contents
move to sidebar hide
 * (Top) <>
* 1 Types <>
* 2 Origin <>
* 3 Licenses <> Toggle Licenses subsection
* 3.1 Mixed-source software <>
* 3.2 Multi-licensing <>
* 4 Legal basis <> Toggle Legal basis subsection
* 4.1 Limitations <>
* 5 Exclusive rights <> Toggle Exclusive rights subsection
* 5.1 Use of the software <>
* 5.2 Inspection and modification of source code <>
* 5.3 Redistribution <>
* 6 Interoperability with software and hardware <> Toggle Interoperability
with software and hardware subsection
* 6.1 Proprietary file formats and protocols <>
* 6.2 Proprietary APIs <>
* 6.3 Vendor lock-in <>
* 6.4 Software limited to certain hardware configurations <>
* 7 Abandonment by proprietors <>
* 8 Pricing and economics <>
* 9 See also <>
* 10 References <>
* 11 External links <> Toggle the table of contents
Proprietary software
51 languages
<a href="https://ar.wikipedia.org/wiki/">https://ar.wikipedia.org/wiki/</a>
%D8%A8%D8%B1%D9%85%D8%AC%D9%8A%D8%A9 %D9%85%D8%AD%D8%AA%D9%83%D8%B1%D8%A9>
* Azrbavcanca
<a href="https://az.wikipedia.org/wiki/%C3%96z%C9%99l_program_t%C9%99minat%C4%B1">https://az.wikipedia.org/wiki/%C3%96z%C9%99l_program_t%C9%99minat%C4%B1</a>
* Bosanski <a href="https://bs.wikipedia.org/wiki/Vlasni%C4%8Dki_softver">https://bs.wikipedia.org/wiki/Vlasni%C4%8Dki_softver</a>
* Catal <a href="https://ca.wikipedia.org/wiki/Programari_de_propietat">https://ca.wikipedia.org/wiki/Programari_de_propietat</a>
* etina <a href="https://cs.wikipedia.org/wiki/Propriet%C3%A1rn%C3%AD_software">https://cs.wikipedia.org/wiki/Propriet%C3%A1rn%C3%AD_software</a>
* Dansk <a href="https://da.wikipedia.org/wiki/Propriet%C3%A6r_software">https://da.wikipedia.org/wiki/Propriet%C3%A6r_software</a>
* Deutsch <a href="https://de.wikipedia.org/wiki/Propriet%C3%A4re_Software">https://de.wikipedia.org/wiki/Propriet%C3%A4re_Software</a>
* Espaol <a href="https://es.wikipedia.org/wiki/Software_propietario">https://es.wikipedia.org/wiki/Software_propietario</a>
* Esperanto <a href="https://eo.wikipedia.org/wiki/Mallibera_programaro">https://eo.wikipedia.org/wiki/Mallibera_programaro</a>
* Euskara <a href="https://eu.wikipedia.org/wiki/Software_jabedun">https://eu.wikipedia.org/wiki/Software_jabedun</a>
<a href="https://fa.wikipedia.org/wiki/">https://fa.wikipedia.org/wiki/</a>
%D9%86%D8%B1%D9%85%E2%80%8C%D8%A7%D9%81%D8%B2%D8%A7%D8%B1_%D9%85%D8%A7%D9%84%DA%A9%DB%8
C%D8%AA%DB%8C>
* Franais <a href="https://fr.wikipedia.org/wiki/Logiciel_propri%C3%A9taire">https://fr.wikipedia.org/wiki/Logiciel_propri%C3%A9taire</a>
* Galego <a href="https://gl.wikipedia.org/wiki/Software_privativo">https://gl.wikipedia.org/wiki/Software_privativo</a>
```

https://ko.wikipedia.org/wiki/%EC%82%AC%EC%9C%A0_%EC%86%8C%ED%94%84%ED%8A%B8%EC%9B%A8%EC%96%B4

https://hi.wikipedia.org/wiki/

%E0%A4%85\$E0%A4%AE%E0%A5%81%E0%A4%95%E0%A5%8D%E0%A4%A4_%E0%A4%B8%E0%A5%8D%E0%A4%B0%E0%A5 %8B%E0%A4%A4_%E0%A4%B8%E0%A5%89%E0%A4%AB%E0%A5%8D%E0%A4%9F%E0%A4%B5%E0%A5%87%E0%A4%AF%E0 %A4%B0>

- * Ido <https://io.wikipedia.org/wiki/Deslibera_programaro>
- * Bahasa Indonesia

https://id.wikipedia.org/wiki/Perangkat lunak milik perorangan

- * slenska https://is.wikipedia.org/wiki/S%C3%A9reignarhugb%C3%BAna%C3%B0ur
- * Italiano https://it.wikipedia.org/wiki/Software_proprietario
- * Latvieu https://lv.wikipedia.org/wiki/SI%C4%93gtais_kods
- * Lietuvi https://lt.wikipedia.org/wiki/U%C5%BEdaras_kodas
- * Magyar

https://hu.wikipedia.org/wiki/Z%C3%A1rt_forr%C3%A1sk%C3%B3d%C3%BA_szoftver

https://ml.wikipedia.org/wiki/

%E0%B4%95%E0%B5%81%E0%B4%A4%E0%B5%8D%E0%B4%A4%E0%B4%B5%E0%B5%8B%E0%B5%8B%E0%B4%AB%E0%B5%8D%E0%B4%B1%E0%B5%8D%E0%B4%B1%E0%B5%8D%E0%B4%B5%E0%B5%86%E0%B4%AF%E0%B5%BC>

https://arz.wikipedia.org/wiki/%D8%B1%D8%AE%D8%B5%D9%87 https://arz.wikipedia.org/wiki/%D8%B1%D8%AE%D8%B5%D9%87 https://arz.wikipedia.org/wiki/%D8%B1%D8%AE%D8%B5%D9%87 https://arz.wikipedia.org/wiki/%D8%B6%D9%83%D9%83%D9%85%D9%85%D9%85%D9%86%D9%83%D9%83%D9%85%D9%95%D9%9

- * Bahasa Melayu https://ms.wikipedia.org/wiki/Perisian_hak_milik
- * Nederlands https://nl.wikipedia.org/wiki/Propri%C3%ABtaire_software

https://ja.wikipedia.org/wiki/

%E3%83%97^kE3%83^kAD%E3%83%97^kE3%83%A9%E3%82%A4%E3%82%A8%E3%82%BF%E3%83%AA%E3%82%BD%E3%83%9 5%E3%83%888E3%82%A6%E3%82%A7%E3%82%A2>

* Norsk bokml https://no.wikipedia.org/wiki/Propriet%C3%A6r_programvare

https://mhr.wikipedia.org/wiki/

* Ozbekcha /

https://uz.wikipedia.org/wiki/Proprietar_dasturiy_ta%CA%BCminot

- * Polski https://pl.wikipedia.org/wiki/Zamkni%C4%99te_oprogramowanie
- * Portugus https://pt.wikipedia.org/wiki/Software_propriet%C3%A1rio
- * Qaraqalpaqsha

https://kaa.wikipedia.org/wiki/Menshikli_programmal%C4%B1q_t%C3%A1miynat

- * Romn https://ro.wikipedia.org/wiki/Software_proprietar
- * Runa Simi https://qu.wikipedia.org/wiki/Kapuqniyuq_Ilamp%27ukaq

https://ru.wikipedia.org/wiki/

%D0%9F%D1%80%D0\displayBE%D0%BF%D1%80\displayB0\displayB5\displayB0\displayB

https://si.wikipedia.org/wiki/

%E0%B7%84%E0%B⁷%92%E0%B6%B8%E0%B7%92%E0%B6%9A%E0%B7%8F%E0%B6%BB_%E0%B6%B8%E0%B7%98%E0%B6%B6%AF%E0%B7%94%E0%B6%9A%E0%B7%8F%E0%B6%82%E0%B6%9C>

* Simple English https://simple.wikipedia.org/wiki/Proprietary_software

https://sd.wikipedia.org/wiki/

%D9%85%D9%84%DA%AA%D9%8A%D8%AA%D9%8A_%D8%B3%D8%A7%D9%81%D9%BD_%D9%88%D9%8A%D8%A6%D8%B1> * Slovenina https://sk.wikipedia.org/wiki/Propriet%C3%A1rny_softv%C3%A9r

https://ckb.wikipedia.org/wiki/

%D9%86%DB%95%D8%B1%D9%85%D8%A7%D9%85%DB%8E%D8%B1%DB%8C_%D8%B3%D8%A7%D9%85%D8%A7%D9%86%D 8%AF%D8%A7%D8%B1>

* / srpski

https://sr.wikipedia.org/wiki/

%D0%92%D0%BB%D0%B0%D1%81%D0%BD%D0%B8%D1%87%D0%BA%D0%B8_%D1%81%D0%BE%D1%84%D1%82%D0%B2%D0%B5%D1%80>

- * Suomi <https://fi.wikipedia.org/wiki/Omisteinen_ohjelmisto>
- * Svenska https://sv.wikipedia.org/wiki/Propriet%C3%A4r_programvara

https://ta.wikipedia.org/wiki/

%E0%AE%A4%E0%AE%A9%E0%AE%BF%E0%AE%AF%E0%AF%81%E0%AE%9F%E0%AF%88%E0%AE%AE%E0%AF%88_%E0%AE%AE%E0%AF%86%E0%AE%A9%E0%AF%8D%E0%AE%AA%E0%AF%8A%E0%AE%B0%E0%AF%81%E0%AE%B3%E0%AF%8D>

https://th.wikipedia.org/wiki/

%E0%B8%8B.KE0%B8.KAD%E0%B8%9F%E0%B8%95%E0%B9%8C%E0%B9%81%E0%B8%A7%E0%B8%A3%E0%B9%8CKE0%B8 %88%E0%B8%B3%E0%B8%81%E0%B8%B1%E0%B8%94%E0%B8%AA%E0%B8%B4%E0%B8%97%E0%B8%98%E0%B8%B4%E0% B9%8C>

- * Trke https://tr.wikipedia.org/wiki/%C3%96zel_m%C3%BClk_yaz%C4%B1l%C4%B1m
- https://uk.wikipedia.org/wiki/

%D0%9F%D1%80%D0%BE%D0%BF%D1%80%D1%96%D1%94%D1%82%D0%B0%D1%80%D0%BD%D0%B5_%D0%BF%D1%80%D 0%BE%D0%B3%D1%80%D0%B0%D0%BC%D0%BD%D0%B5_%D0%B7%D0%B0%D0%B1%D0%B5%D0%B7%D0%B5%D1 %87%D0%B5%D0%BD%D0%BD%D1%8F> https://ur.wikipedia.org/wiki/ %D9%85%D9%84%DA%A9%DB%8C%D8%AA%DB%8C_%D8%B3%D8%A7%D9%81%D9%B9_%D9%88%DB%8C%D8%A6%D8%B1> * Ting Vit https://vi.wikipedia.org/wiki/ Ph%E1%BA%A7n m%E1%BB%81m s%E1%BB%9F h%E1%BB%AFu %C4%91%E1%BB%99c quy%E1%BB%81n> https://zh.wikipedia.org/wiki/%E4%B8%93%E6%9C%89%E8%BD%AF%E4%BB%B6 Edit

- https://www.wikidata.org/wiki/Special:EntityPage/Q218616#sitelinks-wikipedia
- * Article <>
- * Talk <> English
- * Read <>
- * Edit <>
- * View history <> Tools Tools move to sidebar hide Actions
- * Read <>
- * Edit <>
- * View history <> General
- * What links here <>
- * Related changes <>
- * Upload file <>
- * Permanent link <>
- * Page information <>
- * Cite this page <>
- * Get shortened URL <>
- * Download QR code <> Print/export
- * Download as PDF <>
- * Printable version <> In other projects
- * Wikimedia Commons
- https://commons.wikimedia.org/wiki/Category:Proprietary_software
- * Wikidata item https://www.wikidata.org/wiki/Special:EntityPage/Q218616

Appearance move to sidebar hide From Wikipedia, the free encyclopedia Software

released under a license restricting rights

Intellectual property <>

- * Authors' rights <>
- * Copyleft <>
- * Copyright <>
- * Database right <>
- * Farmers' rights <>
- * Geographical indication <>
- * Indigenous intellectual property <>
- * Industrial design right <>
- * Integrated circuit layout design protection <>
- * Intellectual property infringement <>
- * Literary property <>
- * Moral rights <>
- * Patent <>
- * Peasants' rights <>
- * Plant breeders' rights <>
- * Plant genetic resources <>
- * Proprietary software <>
- * Related rights <>
- * Supplementary protection certificate <>
- * Trade dress <>
- * Trade secret <>
- * Trademark <>
- * Utility model <>
- * Patent infringement <>

Related topics

- * Abandonware <>
- * Artificial intelligence and copyright <>
- * Brand protection <>
- * Copyright abolition <>
- * Copyright troll <>
- * Criticism of copyright <>
- * Bioprospecting <>
- * Biopiracy <>
- * Ideaexpression distinction <>
- * Limitations and exceptions to copyright <>
- * Fair dealing <>
- * Fair use <>
- * Paraphrasing <>

- * Right to quote <>
- * Orphan work <>
- * Patent troll <>
- * Pirate Party <>
- * Public domain <>
- * Outline of intellectual property <>
- * Outline of patents <> Higher categories:

Property <> and Property law <>

- * v <> * t <>
- * e <>

Proprietary software is software <> that grants its creator, publisher, or other rightsholder or rightsholder partner a legal monopoly by moderncopyright <> and intellectual property law <> to exclude the recipient from freely sharing the software or modifying it, andin some cases, as is the case with some patent-encumbered and EULA <>-bound software from making use of the software on their own, thereby restricting their freedoms.[1] <>

Proprietary software is a subset <> of non-free software, a term defined in contrast tofree and open-source software <>; non-commercial licenses such as CC BY-NC <> are not deemed proprietary, but are non-free. Proprietary software may either beclosed-source software or source-available software <>.[1] <>[2] <>

Types

[edit <>]

Free/Open Licenses <> Non-free Licenses

Public domain <> & equivalents <> Permissive license <> Copyleft <> (protective license) Noncommercial <> license Proprietary license <> Trade secret <>

Software PD, CC0 <> BSD <>, MIT <>, Apache <> GPL <>, AGPL <> JRL <>, AFPL <> proprietary software, no public license private, internal software

Other creative works PD, CC0 <> CC BY <> CC BY-SA <> CC BY-NC <> Copyright <>, no public license unpublished

Origin

[edit <>]

Until the late 1960s, computersespecially large and expensive mainframe computers <>, machines in specially air-conditioned computer roomswere usually leased <> to customers rather than sold <>.[3] <>[4] <> Service and all software available were usually supplied by manufacturers without separate charge until 1969. Computer vendors usually provided the source code for installed software to customers.[citation needed <>] Customers who developed software often made it available to the public without charge.[5] <> Closed source means computer programs whose source code is not published except to licensees. It is available to be modified only by the organization that developed it and those licensed to use the software.

In 1969, IBM, which had antitrust <> lawsuits pending against it, led an industry change bystarting to charge separately for mainframe software <>[6] <>[7] <> and services, by unbundling hardware and software.[8] <>

Bill Gates <>' "Open Letter to Hobbyists <>" in 1976 decried computer hobbyists' rampantcopyright infringement <> of software, particularly Microsoft'sAltair BASIC <> interpreter, and asserted that their unauthorized use hindered his ability to produce quality software. But the legal status of software copyright <>, especially for object code <>, was not clear until the 1983 appeals court ruling inApple Computer, Inc. v. Franklin Computer Corp <>.[9] <>[10] <>[11] <>

According to Brewster Kahle <> the legal characteristic of software changed also due to the U.S.Copyright Act of 1976 <>.[12] <>

Starting in February 1983 IBM adopted an "object-code <>-only" model for a growing list of their software and stopped shipping much of the source code,[13] <>[14] <> even to licensees.

In 1983, binary software became copyrightable in the United States <> as well by the Apple vs. Franklin <> law decision,[15] <> before which only source code was copyrightable.[16] <> Additionally, the growing availability of millions of computers based on the same microprocessor architecture created for the first time an unfragmented and big enough market for binary distributed software.[16]

Licenses

[edit <>] This section is an excerpt from Software license Proprietary software licenses <>.[edit

https://en.wikipedia.org/w/index.php?title=Software_license&action=edit#Proprietary_software_licenses

] <>A brief, written-out beta test <> software license issued by Macromedia <> in 1995

The tendency to license proprietary software, rather than sell it, dates from the time period before the existence, then the scope of software copyright protection wasclear <>. These licenses have continued in use after software copyright was recognized in the courts, and are considered to grant the company extra protection compared to copyright law.[17] <> According to United States federal law <>, a company can restrict the parties to which it sells but it cannot prevent a buyer from reselling the product. Software licensing agreements usually prohibit resale, enabling the company to maximize revenue.[18] <>

Traditionally, software was distributed in the form of binary object code <> that could not be understood or modified by the user,[19] <> but could be downloaded and run. The user bought a perpetual license to use a particular version of the software.[20] <> Software as service <> (SaaS) vendorswho have the majoritymarket share <> in application software <> as of 2023[update] <[21] <> rarely offer perpetual licenses.[22] <> SaaS licenses are usually temporary and charged on a pay-per-usage or subscription basis,[23] <> although other revenue models such asfreemium <> are also used.[24] <> For customers, the advantages of temporary licenses include reduced upfront cost, increased flexibility, and lower overall cost compared to a perpetual license.[20] <> In some cases, the steep one-time cost demanded by sellers of traditional software were out of the reach ofsmaller businesses <>, but pay-per-use SaaS models makes the software affordable.[25] <>

Mixed-source software

[edit <>]

Software distributions considered as proprietary may in fact incorporate a "mixed source" model including both free and non-free software in the same distribution. [26] <> Most if not all so-called proprietary UNIX <> distributions are mixed source software, bundling open-source components like BIND <>, Sendmail <>, X Window System <>, DHCP <>, and others along with a purely proprietarykernel <> and system utilities. [27] <> [28] <>

Multi-licensing

[edit <>] Main article: Multi-licensing <>

Some free software packages are also simultaneously available under proprietary terms. Examples includeMySQL <>, Sendmail <> and ssh. The original copyright holders for a work of free software, even copyleft free software, can usedual-licensing <> to allow themselves or others to redistribute proprietary versions. Non-copyleft free software (i.e. software distributed under a permissive free software license or released to the public domain) allows anyone to make proprietary redistributions.[29] <>[30] <> Free software that depends on proprietary software is considered "trapped" by the Free Software Foundation. This includes software written only for Microsoft Windows,[31] <> or software that could only run onJava <>, before it became free software.[32]

Legal basis

[edit <>] Further information: Software law <>, Software copyright <>, Software patent <>, and End-user license agreement <> Most of the software is covered by copyright <> which, along with contract law <>, patents <>, and trade secrets <>, provides legal basis for its owner to establish exclusive rights.[33] <>

A software vendor delineates the specific terms of use in an end-user license agreement <> (EULA). The user may agree to this contract in writing, interactively on screen (clickwrap <>), or by opening the box containing the software (shrink wrap licensing <>). License agreements are usually not negotiable <>.[34] <> Software patents <> grant exclusive rights to algorithms, software features, or otherpatentable subject matter <>, with coverage varying by jurisdiction. Vendors sometimes grant patent rights to the user in the license agreement.[35] <> The source code <> for a piece of proprietary software is routinely handled as atrade secret <>.[36] <> Software can be made available with fewer restrictions on licensing or source-code access; software that satisfies certain conditions of freedom and openness is known as "free <>" or "open-source <>."[37] <>

Limitations

[edit <>]

Since license agreements do not override applicable copyright law <> or contract law <>, provisions in conflict with applicable law are not enforceable. [38] <> Some software is specifically licensed and not sold, in order to avoid limitations of copyright such as thefirst-sale doctrine <>.[39] <>

Exclusive rights

[edit <>]

The owner of proprietary software exercises certain exclusive rights <> over the software. The owner can restrict the use, inspection of source code, modification of source code, and redistribution.

Use of the software

[edit <>] Further information: Copy protection <>, Crippleware <>, and Price discrimination <>

Vendors typically limit the number of computers on which software can be used, and prohibit the user from installing the software on extra computers. [citation needed <>] Restricted use is sometimes enforced through a technical measure, such asproduct activation <>, a product key <> or serial number, a hardware key <>, or copy protection <>.

Vendors may also distribute versions that remove particular features, or versions which allow only certain fields of endeavor, such as non-commercial, educational, or non-profit use.

Use restrictions vary by license:

- * Windows Vista Starter <> is restricted to running a maximum of three concurrent applications.
- * The retail edition of Microsoft Office Home and Student 2007 <> is limited to non-commercial use on up to three devices in one household.
- * Windows XP <> can be installed on one computer, and limits the number of network file sharing connections to 10.[40] <> The Home Edition <> disables features present in Windows XP Professional.
- * Traditionally, Adobe <> licenses are limited to one user, but allow the user to install a second copy on a home computer or laptop.[41] <> This is no longer true with the switching to Creative Cloud.
- * iWork '09 <>, Apple's productivity suite, is available in a five-user family pack, for use on up to five computers in a household.[42] <> Inspection and modification of source code [edit <>] See also: Open-source software <> and Crippleware <> Vendors typically distribute proprietary software in compiled <> form, usually themachine language <> understood by the computer's central processing unit <>. They typically retain thesource code <>, or human-readable version of the software, often written in ahigher level programming language <>.[43] <> This scheme is often referred to as closed source.[44] <>

While most proprietary software is distributed without the source code, some vendors distribute the source code or otherwise make it available to customers. For example, users who have purchased a license for the Internet forum software vBulletin <> can modify the source for their own site but cannot redistribute it. This is true for many web applications, which must be in source code form when being run by a web server. The source code is covered by anon-disclosure agreement <> or a license that allows, for example, study and modification, but not redistribution.[45] <> The text-based email client Pine <> and certain implementations of Secure Shell <> are distributed with proprietary licenses that make the source code available.[citation needed <>]Some licenses for proprietary software allow distributing changes to the source code, but only to others licensed for the product, and some[46] <> of those modifications are eventually picked up by the vendor.

Some governments fear that proprietary software may include defects <> or malicious features <> which would compromise sensitive information. In 2003 Microsoft established a Government Security Program (GSP) to allow governments to view source code and Microsoft security documentation, of which the Chinese government <> was an early participant. [47] <> [48] <> The program is part of Microsoft's broader Shared Source Initiative <> which provides source code access for some products. The Reference Source License (Ms-RSL) and Limited Public License (Ms-LPL) are proprietary software licenses where the source code ismade available <>.

Governments have also been accused of adding such malware to software themselves. According to documents released byEdward Snowden <>, the NSA <> has used covert partnerships with software companies to make commercial encryption software exploitable to eavesdropping, or to insertbackdoors <>.[49] <>[50] <>

Software vendors sometimes use obfuscated code <> to impede users who would reverse engineer <> the software.[51] <> This is particularly common with certainprogramming languages <>.[citation needed <>] For example, the bytecode <> for programs written in Java <> can be easily decompiled <> to somewhat usable code,[citation needed <>] and the source code for programs written in scripting languages <> such as PHP <> or JavaScript <> is available at run time <>.[52] <>

Redistribution

[edit <>] Further information: Shareware <> See also: Freely redistributable software <>

Proprietary software vendors can prohibit the users from sharing the software with others. Another unique license is required for another party to use the software.

In the case of proprietary software with source code available, the vendor may also prohibit customers from distributing their modifications to the source code

Shareware <> is closed-source software whose owner encourages redistribution at no cost, but which the user sometimes must pay to use after a trial period. The fee usually allows use by a single user or computer. In some cases, software features are restricted during or after the trial period, a practice sometimes calledcrippleware <>.

Interoperability with software and hardware

[edit <>] Further information: Interoperability Software <>

Proprietary file formats and protocols

[edit <>] Further information: Proprietary format <> and Proprietary protocol

<>

Proprietary software often[citation needed <>] stores some of its data in file formats that are incompatible <> with other software, and may also communicate using protocols <> which are incompatible. Such formats and protocols may be restricted astrade secrets <> or subject to patents <>.[citation needed <>]

Proprietary APIs

[edit <>]

A proprietary application programming interface <> (API) is a software library <> interface "specific to one device or, more likely to a number of devices within a particular manufacturer's product range."[53] <> The motivation for using a proprietary API can be vendor lock-in <> or because standard APIs do not support the device's functionality.[53] <>

The European Commission <>>, in its March 24, 2004, decision on Microsoft's business practices,[54] <> quotes, in paragraph 463, Microsoft general manager forC++ <> development Aaron Contorer as stating in a February 21, 1997, internal Microsoft memo drafted forBill Gates <>:

The Windows API <> is so broad, so deep, and so functional that most ISVs would be crazy not to use it. And it is so deeply embedded in the source code of many Windows apps that there is a huge switching cost to using a different operating system instead.

Early versions of the iPhone SDK <> were covered by a non-disclosure agreement <>. The agreement forbade independent developers from discussing the content of the interfaces. Apple discontinued the NDA in October 2008.[55] <>

Vendor lock-in

[edit <>] Further information: Vendor lock-in <>

Any dependency on the future versions and upgrades for a proprietary software package can createvendor lock-in, entrenching a monopoly position.[56] <>

Software limited to certain hardware configurations

[edit <>

Proprietary software may also have licensing terms that limit the usage of that software to a specific set of hardware. Apple <> has such a licensing model formacOS <>, an operating system which is limited to Apple hardware, both by licensing and various design decisions. This licensing model has been affirmed by the United States Court of Appeals for the Ninth Circuit <>.[57] <>

Abandonment by proprietors

[edit <>] Main article: Abandonware <>

Proprietary software which is no longer marketed, supported or sold by its owner is calledabandonware <>, the digital form of orphaned works <>. If the proprietor of a software package should cease to exist, or decide to cease or limit production or support for a proprietary software package, recipients and users of the package may have no recourse if problems are found with the software. Proprietors can fail to improve and support software because of business problems.[58] <> Support for older or existing versions of a software package may be ended to force users to upgrade and pay for newer versions[59] <> (planned obsolescence <>). Sometimes another vendor or a software's community themselves canprovide support <> for the software, or the users can migrate to either competing systems with longer support life cycles or toFOSS <>-based systems.[60] <>

Some proprietary software is released by their owner at end-of-life <> as open-source or source available <> software, often to prevent the software from

becoming unsupported and unavailableabandonware <>.[61] <>[62] <>[63] <> 3D Realms <> and id Software <> are famous for the practice of releasing closed source software into theopen source <>.[further explanation needed <>] Some of those kinds are free-of-charge downloads (freeware <>), some are still commercially sold (e.g.Arx Fatalis <>).[further explanation needed <>] More examples of formerly closed-source software in theList of commercial software with available source code <> and List of commercial video games with available source code <>.

Pricing and economics

[edit <>] See also: Commercial software <>

Proprietary software is not synonymous with commercial software <>,[64] <>[65] <> although the two terms are sometimes used synonymously in articles about free software.[66] <>[67] <> Proprietary software can be distributed at no cost or for a fee, andfree software <> can be distributed at no cost or for a fee.[68] <> The difference is that whether proprietary software can be distributed, and what the fee would be, is at the proprietor's discretion. With free software, anyone who has a copy can decide whether, and how much, to charge for a copy or related services.[69] <>

Proprietary software that comes for no cost is called freeware <>.

Proponents of commercial proprietary software argue that requiring users to pay for software as a product increases funding or time available for the research and development <> of software. For example, Microsoft <> says that per-copy fees maximize the profitability of software development.[70] <>

Proprietary software generally creates greater commercial activity over free software, especially in regard to market revenues.[71] <> Proprietary software is often sold with a license that gives the end user right to use the software.

Technical support for proprietary software can often be provided only by employees of the company that created the program and such service is included with the software. However, a dedicated technical support system increases the cost of software maintenance, which has an impact on its price.[72] <>

See also

[edit <>]

- * Business software <>
- * Commercial off-the-shelf <>
- * Comparison of open-source and closed-source software <>
- * Proprietary hardware <>
- * Retail software <>
- * Enshittification <>

References

[edit <>]
* ^ a <> b <> Saraswati Experts. "2.5.3"

<https://books.google.com/books?id=OtlBDAAAQBAJ&pg=SA1-PA31>. COMPUTER SCIENCE WITH C++. Saraswati House Pvt Ltd. p. 1.27. ISBN <> 978-93-5199-877-8 <>. Retrieved29 June 2017.

* ^ <> Brendan Scott (March 2003). "Why Free Software's Long Run TCO must be lower" https://books.google.com/books?id=C55YaWmDBiAC&pg=PA51. AUUGN. 24 (1). AUUG, Inc. 1. Definitions. Retrieved 29 June 2017.

* ^ <> Ceruzzi, Paul E. (2003). A History of Modern Computing https://archive.org/details/historyofmodernc00ceru_0/page/128. Cambridge, MA: MIT Press <>. p. 128

https://archive.org/details/historyofmodernc00ceru_0/page/128. ISBN <> 0-262-53203-4 <>. Although IBM agreed to sell its machines as part of a Consent Decree effective January 1956, leasing continued to be its preferred way of doing business.

* ^ <> "The History of Equipment Leasing"

https://web.archive.org/web/20080411024345/http://www.leasegenie.com/History_of_Leasing.html, Lease Genie, archived from the original

http://www.leasegenie.com/History_of_Leasing.html on April 11, 2008, retrieved November 12, 2010, In the 1960s, IBM and Xerox recognized that substantial sums could be made from the financing of their equipment. The leasing of computer and office equipment that occurred then was a significant contribution to leasings [sic] growth, since many companies were exposed to equipment leasing for the first time when they leased such equipment.

* ^ <> "Overview of the GNU System"

https://www.gnu.org/gnu/gnu-history.en.html. GNU Operating System. Free Software Foundation. 2016-06-16. Retrieved 2017-05-01.

- * ^ <> Pugh, Emerson W. (2002). "Origins of Software Bundling". IEEE Annals of the History of Computing <>. 24 (1): 5758. doi <>:10.1109/85.988580 https://doi.org/10.1109%2F85.988580.
- * ^ <> Hamilton, Thomas W. (1969). IBM's Unbundling Decision: Consequences for Users and the Industry. Programming Sciences Corporation.

```
<a href="https://web.archive.org/web/20160703062451/http://www-03.ibm.com/ibm/history/history/decade_1960.html">https://web.archive.org/web/20160703062451/http://www-03.ibm.com/ibm/history/history/decade_1960.html</a>
.IBM <>. n.d. Archived from the original
<a href="http://www-03.ibm.com/ibm/history/history/decade">http://www-03.ibm.com/ibm/history/history/decade</a> 1960.html> on July 3, 2016.
RetrievedMay 28, 2016. Rather than offer hardware, services and software
exclusively in packages, marketers 'unbundled' the components and offered them
for sale individually. Unbundling gave birth to the multibillion-dollar
software and services industries, of which IBM is today a world leader.
 * ^ <> Gates, Bill (February 3, 1976). "An Open Letter to Hobbyists"
<a href="https://upload.wikimedia.org/wikipedia/commons/1/14/Bill_Gates_Letter_to_Hobbyists.jpg">https://upload.wikimedia.org/wikipedia/commons/1/14/Bill_Gates_Letter_to_Hobbyists.jpg</a>
. RetrievedMay 28, 2016.
* ^ <> Swann, Matthew (18 November 2004). Executable Code is Not the Proper
Subject of Copyright Law (Technical report). Cal Poly State University.
CPSLO-CSC-04-02.
 * ^ <> Pamela Samuelson (Sep 1984), "CONTU Revisited: The Case against
Copyright Protection for Computer Programs in Machine-Readable Form"
<a href="https://web.archive.org/web/20170804014725/http://scholarship.law.berkeley.edu:80/facpubs/333/">https://web.archive.org/web/20170804014725/http://scholarship.law.berkeley.edu:80/facpubs/333/</a>
,Duke Law Journal, 1984 (4): 663769, doi <>:10.2307/1372418
<a href="https://doi.org/10.2307%2F1372418">https://doi.org/10.2307%2F1372418</a>>, JSTOR <> 1372418
<a href="https://www.jstor.org/stable/1372418">https://www.jstor.org/stable/1372418</a>, archived from the original
<a href="https://scholarship.law.berkeley.edu/facpubs/333">https://scholarship.law.berkeley.edu/facpubs/333</a> on Aug 4, 2017
 * ^ <> Robert X. Cringely <>. Cringely's interview with Brewster Kahle
<a href="https://web.archive.org/web/20190118221148/https://www.youtube.com/watch?v=-1jUr0JrYEk&ql=US&hl=en">https://web.archive.org/web/20190118221148/https://www.youtube.com/watch?v=-1jUr0JrYEk&ql=US&hl=en</a>
.YouTube. 46 minutes in. Archived from the original
<a href="https://www.youtube.com/watch?v=-1jUr0JrYEk">https://www.youtube.com/watch?v=-1jUr0JrYEk</a> on 2019-01-18.
* ^ <> Cantrill, Bryan <> (2014-09-17). Corporate Open Source Anti-patterns
<a href="https://ghostarchive.org/varchive/youtube/20211027/Pm8P4oCIY3g">https://ghostarchive.org/varchive/youtube/20211027/Pm8P4oCIY3g</a>. YouTube.
Event occurs at 3:15. Archived from the original
<a href="https://www.youtube.com/watch?v=Pm8P4oCIY3g&t=3m15s">https://www.youtube.com/watch?v=Pm8P4oCIY3g&t=3m15s</a> on 2021-10-27. Retrieved
2015-12-26.
 * ^ <> Gallant, John (1985-03-18). "IBM policy draws fire - Users say source
code rules hamper change'
<a href="https://books.google.com/books?id=4Wgmey4obagC&q=1983object-only+model+IBM&pg=PA8">https://books.google.com/books?id=4Wgmey4obagC&q=1983object-only+model+IBM&pg=PA8></a>
.Computerworld <>. Retrieved 2015-12-27. While IBM's policy of withholding
source code for selected software products has already marked its second
anniversary, users are only now beginning to cope with the impact of that
decision. But whether or not the advent of object-code-only products has
affected their day-to-day DP operations, some users remain angry about IBM's
decision. Announced in February 1983, IBM's object-code-only policy has been
applied to a growing list of Big Blue system software products
 * ^ <> Hassett, Rob (Dec 18, 2012). "Impact of Apple vs. Franklin Decision"
<a href="http://www.internetlegal.com/impact-of-apple-vs-franklin-decision/">http://www.internetlegal.com/impact-of-apple-vs-franklin-decision/</a>>.
InternetLegal.com. Archived
<a href="https://web.archive.org/web/20230908092517/https://internetlegal.com/impact-of-apple-vs-franklin-decision/">https://web.archive.org/web/20230908092517/https://internetlegal.com/impact-of-apple-vs-franklin-decision/</a>
from the original on Sep 8, 2023.
 * ^ a <> b <> Landley, Rob (2009-05-23). "May 23, 2009"
<a href="https://landley.net/notes-2009.html#23-05-2009">https://landley.net/notes-2009.html#23-05-2009</a>>. landley.net. Retrieved
2024-06-22. So if open source used to be the norm back in the 1960's and 70's,
how did this _change_? Where did proprietary software come from, and when, and
how? How did Richard Stallman's little utopia at the MIT AI lab crumble and
force him out into the wilderness to try to rebuild it? Two things changed in
the early 80's: the exponentially growing installed base of microcomputer
hardware reached critical mass around 1980, and a legal decision altered
copyright law to cover binaries in 1983. Increasing volume: The microprocessor
creates millions of identical computers
 * ^ <> Terasaki 2013 <>, p. 469. sfn error: no target: CITEREFTerasaki2013 (
help <>)
 * ^ <> Terasaki 2013 <>, pp. 469470. sfn error: no target:
CITEREFTerasaki2013 (help <>)
 * ^ <> Boyle 2003 <>, p. 45. sfn error: no target: CITEREFBoyle2003 (help <>)
* ^ a <> b <> Clohessy et al. 2020 <>, pp. 4041. sfn error: no target:
CITEREFClohessy_et_al.2020 (help <>)
  ^ <> Watt 2023 <>, p. 4. sfn error: no target: CITEREFWatt2023 (help <>)
* ^ <> Dempsey & Kelliher 2018 <>, p. 48. sfn error: no target:
CITEREFDempseyKelliher2018 (help <>)
  * ^ <> Dempsey & Kelliher 2018 <>, pp. 48, 57. sfn error: no target:
CITEREFDempseyKelliher2018 (help <>)
 * ^ <> Dempsey & Kelliher 2018 <>, pp. 6163. sfn error: no target:
CITEREFDempseyKelliher2018 (help <>)
   ^ <> Dempsey & Kelliher 2018 <>, p. 2. sfn error: no target:
CITEREFDempseyKelliher2018 (help <>)
 * ^ <> Engelfriet, Arnoud (AugustSeptember 2006). "The best of both worlds"
<a href="https://web.archive.org/web/20130914013626/http://www.iam-magazine.com/issues/Article.ashx?g=64d0a423-1249-4de3-929c-4d0a423-1249-4de3-929c-4d0a423-1249-4de3-929c-4d0a423-1249-4de3-929c-4d0a423-1249-4de3-929c-4d0a423-1249-4de3-929c-4d0a423-1249-4de3-929c-4d0a423-1249-4de3-929c-4d0a423-1249-4de3-929c-4d0a423-1249-4de3-929c-4d0a423-1249-4de3-929c-4d0a423-1249-4de3-929c-4d0a423-1249-4de3-929c-4d0a423-1249-4de3-929c-4d0a423-1249-4de3-929c-4d0a423-1249-4de3-929c-4d0a423-1249-4de3-929c-4d0a423-1249-4de3-929c-4d0a423-1249-4de3-929c-4d0a423-1249-4de3-929c-4d0a423-1249-4de3-929c-4d0a423-1249-4de3-929c-4d0a423-1249-4de3-929c-4d0a423-1249-4de3-929c-4d0a423-1249-4de3-929c-4d0a423-1249-4de3-929c-4d0a423-1249-4de3-929c-4d0a423-1249-4de3-929c-4d0a423-1249-4de3-929c-4d0a423-1249-4d0a423-1249-4d0a423-1249-4d0a423-1249-4d0a423-1249-4d0a423-1249-4d0a423-1249-4d0a423-1249-4d0a423-1249-4d0a423-1249-4d0a423-1249-4d0a423-1249-4d0a423-1249-4d0a423-1249-4d0a423-1249-4d0a423-1249-4d0a423-1249-4d0a423-1249-4d0a423-1249-4d0a423-1249-4d0a423-1249-4d0a423-1249-4d0a423-1249-4d0a423-1249-4d0a423-1249-4d0a423-1249-4d0a423-1249-4d0a423-1249-4d0a423-1249-4d0a423-1249-4d0a423-1249-4d0a423-1249-4d0a423-1249-4d0a423-1249-4d0a423-1249-4d0a423-1249-4d0a423-1249-4d0a423-1249-4d0a423-1249-4d0a423-1249-4d0a423-1249-4d0a423-1249-4d0a423-1249-4d0a423-1249-4d0a423-1249-4d0a423-1249-4d0a423-1249-4d0a423-1249-4d0a423-1249-4d0a423-1449-4d0a423-1449-4d0a423-1449-4d0a423-1449-4d0a423-1449-4d0a423-1449-4d0a423-1449-4d0a423-1449-4d0a423-1449-4d0a423-1449-4d0a423-1449-4d0a423-1449-4d0a423-1449-4d0a423-1449-4d0a423-1449-4d0a423-1449-4d0a423-1449-4d0a423-1449-4d0a423-1449-4d0a423-4d0a423-4d0a423-4d0a423-1449-4d0a423-4d0a423-4d0a423-4d0a423-4d0a423-4d0a423-4d0a423-4d0a423-4d0a423-4d0a423-4d0a423-4d0a423-4d0a423-4d0a423-4d0a423-4d0a423-4d0a423-4d0a423-4d0a423-4d0a423-4d0a423-4d0a423-4d0a423-4d0a423-4d0a423-4d0a423-4d0a423-4d0a423-4d0a423-4d0a423-4d0a423-4d0a423-4d0a423-4d0a423-4d0a423-4d0a423-4d0a423-4d0a423-4d0a423-4d0a423-4d0a423-4d0a423-4d0a423-4d0a423-4d0
91b57c15f702>
.Intellectual Asset Management (IAM) (19). Gavin Stewart. Archived from the
original
<a href="http://www.iam-magazine.com/issues/article.ashx?g=64d0a423-1249-4de3-929c-91b57c15f702">http://www.iam-magazine.com/issues/article.ashx?g=64d0a423-1249-4de3-929c-91b57c15f702</a>
```

* ^ <> "Chronological History of IBM: 1960s"

on 2013-09-14. Retrieved 2008-05-19.

- * ^ <> Loftus, Jack (2007-02-19). "Managing mixed source software stacks"
- https://web.archive.org/web/20100603162347/http://searchenterpriselinux.techtarget.com/news/article/0,289142.sid39 qci1244277,00.html>
- . LinuxWorld. Archived fromthe original
- http://searchenterpriselinux.techtarget.com/news/article/0,289142,sid39_gci1244277,00.html on 2010-06-03.
- * ^ <> Tan, Aaron (2006-12-28). "Novell: We're a 'mixed-source' company" http://www.zdnetasia.com/news/software/0,39044164,61977995,00.htm. CNET Networks, Inc.
- * ^ <> Rosenberg, Donald (2000). Open Source: The Unauthorized White Papers https://archive.org/details/opensourceunauth00rose/page/109. Foster City: IDG. p.109 https://archive.org/details/opensourceunauth00rose/page/109. ISBN <> 0-7645-4660-0 <>.
- * ^ <> "Categories of Free and Non-Free Software"
- https://www.gnu.org/philosophy/categories.html#PublicDomainSoftware. GNU Project.
- * ^ <> Free Software Foundation <> (2009-05-05). "Frequently Asked Questions about the GNU Licenses"
- https://www.gnu.org/licenses/gpl-faq.html#WindowsRuntimeAndGPL. Retrieved 2017-05-01.
- * ^ <> Richard Stallman (2004-04-12). "Free But Shackled The Java Trap"
- https://www.gnu.org/philosophy/java-trap.html. Retrieved 2017-05-01.

 * ^ <> Liberman, Michael (1995). "Overreaching Provisions in Software License Agreements" http://jolt.richmond.edu/v1i1/liberman.html. Richmond Journal of
- Law and Technology <>. 1: 4. Retrieved November 29, 2011.

 * ^ <> Limitations and Exceptions to Copyright and Neighbouring Rights in the
 Digital Environment: An International Library Perspective (2004)
- http://www.ifla.org/publications/limitations-and-exceptions-to-copyright-and-neighbouring-rights-in-the-digital-environm. IFLA (2013-01-22). Retrieved on 2013-06-16.
- *^<> Daniel A. Tysver (2008-11-23). "Why Protect Software Through Patents" http://www.bitlaw.com/software-patent/why-patent.html>. Bitlaw. Retrieved 2009-06-03. In connection with the software, an issued patent may prevent others from utilizing a certain algorithm (such as the GIF image compression algorithm) without permission, or may prevent others from creating software programs that perform a function in a certain way. In connection with computer software, copyright law can be used to prevent the total duplication of a software program, as well as the copying of a portion of software code.
- * ^ <> Donovan, S. (1994). "Patent, copyright and trade secret protection for software".IEEE Potentials. 13 (3): 20. doi <>:10.1109/45.310923 <https://doi.org/10.1109%2F45.310923>. S2CID <> 19873766 <https://api.semanticscholar.org/CorpusID:19873766>. Essentially there are only three ways to protect computer software under the law: patent it, register a copyright for it, or keep it as a trade secret.
- *^ <> Eben Moglen (2005-02-12). "Why the FSF gets copyright assignments from contributors" http://www.gnu.org/licenses/why-assign.html. Retrieved 2017-05-01. Under US copyright law, which is the law under which most free software programs have historically been first published, [...] only the copyright holder or someone having assignment of the copyright can enforce the license.
- * ^ <> White, Aoife (2012-07-03). "Oracle Can't Stop Software License Resales, EU Court Says"
- https://www.bloomberg.com/news/2012-07-03/oracle-can-t-stop-software-license-resales-eu-court-says-1-.html. Bloomberg.
- * ^ <> Microsoft Corporation <> (2005-04-01). "End-User License Agreement for Microsoft Software: Microsoft Windows XP Professional Edition Service Pack 2" http://www.microsoft.com/about/legal/useterms/> (PDF). Microsoft <>. p. Page 3 . Retrieved2009-04-29.
- * ^ <> Microsoft Corporation <> (2005-04-01). "End-User License Agreement for Microsoft Software: Microsoft Windows XP Professional Edition Service Pack 2" http://www.microsoft.com/about/legal/useterms/> (PDF). Microsoft <>. p. Page 1. Retrieved2009-04-29. You may install, use, access, display and run one copy of the Software on a single computer, such as a workstation, terminal or another device ("Workstation Computer"). The Software may not be used by more than two (2) processors at any one time on any single Workstation Computer. ... You may permit a maximum of ten (10) computers or other electronic devices (each a 'Device') to connect to the Workstation Computer to utilize one or more of the following services of the Software: File Services, Print Services, Internet Information Services, Internet Connection Sharing and telephony services
- * ^ <> Adobe Systems <>, Adobe Software License Agreement https://www.adobe.com/products/eulas/pdfs/gen_wwcombined_20091001_1604.pdf (PDF), retrieved 2010-06-09
- * ^ <> Parker, Jason (January 27, 2009). "Apple iWork '09 review: Apple iWork '09" https://www.cnet.com/reviews/apple-iwork-09-review/>. CNET. Retrieved May 2, 2022.
- * ^ <> Heffan, Ira V. (1997). "Copyleft: Licensing Collaborative Works in the

```
Digital Age"
<a href="https://web.archive.org/web/20130514171754/http://www.open-bar.org/docs/copyleft.pdf">https://web.archive.org/web/20130514171754/http://www.open-bar.org/docs/copyleft.pdf</a>
(PDF). Stanford Law Review. 49 (6): 1490. doi <>:10.2307/1229351
<a href="https://doi.org/10.2307%2F1229351">https://doi.org/10.2307%2F1229351</a>. JSTOR <> 1229351
<a href="https://www.jstor.org/stable/1229351">https://www.jstor.org/stable/1229351</a>. Archived from the original
<a href="http://www.open-bar.org/docs/copyleft.pdf">http://www.open-bar.org/docs/copyleft.pdf</a>> (PDF) on 2013-05-14. Retrieved
2009-07-27. Under the proprietary software model, most software developers
withhold their source code from users.
 * ^ <> David A. Wheeler (2009-02-03). "Free-Libre / Open Source Software
(FLOSS) is Commercial Software"
<a href="http://www.dwheeler.com/essays/commercial-floss.html">http://www.dwheeler.com/essays/commercial-floss.html</a>. Retrieved 2009-06-03.
* ^ <> "Distribution of IBM Licensed Programs and Licensed Program Materials
and Modified Agreement for IBM Licensed Programs"
<a href="http://www.landley.net/history/mirror/ibm/oco.html">http://www.landley.net/history/mirror/ibm/oco.html</a>. Announcement Letters.
IBM. February 8, 1983. 283-016.
 * ^ <> Greg Mushial (July 20, 1983), "Module 24: SLAC Enhancements to and
Beautifications of the IBM H-Level Assembler for Version 2.8"
<a href="https://www.gsf-soft.com/Documents/SLAC-MODS.html">https://www.gsf-soft.com/Documents/SLAC-MODS.html</a>, SLAC VM NOTEBOOK, Stanford
Linear Accelerator Center
* ^ <> Shankland, Stephen (January 30, 2003). "Governments to see Windows
code" <a href="https://www.cnet.com/tech/tech-industry/governments-to-see-windows-code/">https://www.cnet.com/tech/tech-industry/governments-to-see-windows-code/</a>
. CNET. Retrieved May 2, 2022.
* ^ <> Gao, Ken (February 28, 2003). "China to view Windows code"
<a href="https://www.cnet.com/tech/tech-industry/china-to-view-windows-code/">https://www.cnet.com/tech/tech-industry/china-to-view-windows-code/</a>. CNET.
RetrievedMay 2, 2022.
 * ^ <> James Ball <>, Julian Borger and Glenn Greenwald (2013-09-06). "US and
UK spy agencies defeat privacy and security on the internet"
<a href="https://www.theguardian.com/world/2013/sep/05/nsa-gchq-encryption-codes-security">https://www.theguardian.com/world/2013/sep/05/nsa-gchq-encryption-codes-security></a>
.The Guardian.
* ^ <> Bruce Schneier (2013-09-06). "How to remain secure against NSA
surveillance"
<a href="https://www.theguardian.com/world/2013/sep/05/nsa-how-to-remain-secure-surveillance">https://www.theguardian.com/world/2013/sep/05/nsa-how-to-remain-secure-surveillance</a>
.The Guardian.
* ^ <> Jacob, Matthias; Boneh, Dan; Felten, Edward <> (30 October 2003).
"Attacking an Obfuscated Cipher by Injecting Faults"
<a href="https://archive.org/details/springer_10.1007-b11725/page/n26/mode/1up">https://archive.org/details/springer_10.1007-b11725/page/n26/mode/1up</a>. In
Feigenbaum, Joan <> (ed.). Digital Rights Management: ACM CCS-9 Workshop, DRM
2002, Washington, DC, USA, November 18, 2002, Revised Papers
<a href="https://archive.org/details/springer_10.1007-b11725">https://archive.org/details/springer_10.1007-b11725</a>. Second International
Workshop on Digital Rights Management. Lecture Notes in Computer Science. Vol.
2696.Springer Berlin Heidelberg <>. p. 17. ISBN <> 978-3-540-44993-5 <>.
Retrieved12 January 2024 via Internet Archive <>.
 * ^ <> Tony Patton (2008-11-21). "Protect your JavaScript with obfuscation"
<a href="https://archive.today/20140315082054/http://www.techrepublic.com/blog/software-engineer/protect-your-javascript-with-obfuscation/">https://archive.today/20140315082054/http://www.techrepublic.com/blog/software-engineer/protect-your-javascript-with-obfuscation/</a>
.TechRepublic. Archived from the original
<a href="https://www.techrepublic.com/article/protect-your-javascript-with-obfuscation/">https://www.techrepublic.com/article/protect-your-javascript-with-obfuscation/>
on March 15, 2014. Retrieved May 2, 2022. While the Web promotes the sharing
of such code, there are times when you or a client may not want to share their
JavaScript code. This may be due to the sensitive nature of data within the
code, proprietary calculations, or any other scenario.
* ^ a <> b <> Orenstein, David (January 10, 2000). "Application Programming
Interface'
<a href="https://www.computerworld.com/article/2593623/application-programming-interface.html">https://www.computerworld.com/article/2593623/application-programming-interface.html</a>
.Computerworld. Retrieved May 2, 2022.
* ^ <> "Commission Decision of 24.03.2004 relating to a proceeding under
Article 82 of the EC Treaty (Case COMP/C-3/37.792 Microsoft)"
<a href="https://web.archive.org/web/20081028213407/http://ec.europa.eu/comm/competition/antitrust/cases/decisions/37792/en.pdf">https://web.archive.org/web/20081028213407/http://ec.europa.eu/comm/competition/antitrust/cases/decisions/37792/en.pdf</a>
(PDF). European Commission <>. March 24, 2004. Archived from the original
<a href="http://ec.europa.eu/comm/competition/antitrust/cases/decisions/37792/en.pdf">http://ec.europa.eu/comm/competition/antitrust/cases/decisions/37792/en.pdf</a>
(PDF) on October 28, 2008. Retrieved June 17, 2009.
 * ^ <> Wilson, Ben (2008-10-01). "Apple Drops NDA for Released iPhone
Software"
<a href="https://web.archive.org/web/20130308181607/http://reviews.cnet.com/8301-19512_7-10115774-233.html">https://web.archive.org/web/20130308181607/http://reviews.cnet.com/8301-19512_7-10115774-233.html</a>
.CNET. Archived from the original
<a href="https://www.cnet.com/tech/mobile/apple-drops-nda-for-released-iphone-software/">https://www.cnet.com/tech/mobile/apple-drops-nda-for-released-iphone-software/</a>
on 2013-03-08. Retrieved 2022-05-02.
* ^ <> The Linux Information Project (2006-04-29). "Vendor Lock-in Definition"
<a href="http://www.linfo.org/vendor_lockin.html">http://www.linfo.org/vendor_lockin.html</a>. Retrieved 2009-06-11. Vendor
lock-in, or just lock-in, is the situation in which customers are dependent on
a single manufacturer or supplier for some product [...] This dependency is
typically a result of standards that are controlled by the vendor [...] It can
grant the vendor some extent of monopoly power [...] The best way for an
organization to avoid becoming a victim of vendor lock-in is to use products
that conform to free, industry-wide standards. Free standards are those that
can be used by anyone and are not controlled by a single company. In the case
of computers, this can usually be accomplished by using free software rather
than proprietary software (i.e., commercial software).
```

* ^ <> Don Reisinger (2011-09-29). "Apple wins key battle against Psystar over Mac clones" https://www.cnet.com/home/smart-home/apple-wins-key-battle-against-psystar-over-mac-clones/ . Retrieved2022-05-02. * ^ <> "What happens when a proprietary software company dies?" https://www.linux.com/news/what-happens-when-proprietary-software-company-dies/ . Linux. October 24, 2003. Retrieved May 2, 2022. * ^ <> Livingston, Brian (December 15, 2006). "Microsoft Turns Up The Heat On Windows 2000 Users" .CRN. Archived from the original https://www.crn.com/news/channel-programs/196700124/microsoft-turns-up-the-heat-on-windows-2000-users.htm on May 3, 2022. Retrieved May 2, 2022. * ^ <> Cassia, Fernando (March 28, 2007). "Open Source, the only weapon against 'planned obsolescence'" .The Inquirer <>. Archived from the original http://www.theinquirer.net/inquirer/news/1001739/open-source-weapon-planned-obsolescence> on November 22, 2012. Retrieved August 2, 2012. * ^ <> Bell, John (October 1, 2009). "Opening the Source of Art" https://web.archive.org/web/20140330084636/http://timreview.ca/article/294. Technology Innovation Management Review. Archived from the original http://www.johnpbell.com/opening-the-source-of-art/ on March 30, 2014. RetrievedMay 2, 2022, that no further patches to the title would be forthcoming. The community was predictably upset. Instead of giving up on the game, users decided that if Activision wasn't going to fix the bugs, they would. They wanted to save the game by getting Activision to open the source so it could be kept alive beyond the point where Activision lost interest. With some help from members of the development team that were active on fan forums, they were eventually able to convince Activision to release Call to Power II's source code in October of 2003. * ^ <> Wen, Howard (June 10, 2004). "Keeping the Myths Alive" https://web.archive.org/web/20130406161344/http://www.linuxdevcenter.com/pub/a/linux/2004/06/10/mythdevelopers.html . Linux Dev Center. Archived fromthe original http://linuxdevcenter.com/pub/a/linux/2004/06/10/mythdevelopers.html on April 6, 2013. Retrieved December 22, 2012. fans of the Myth trilogy have taken this idea a step further: they have official access to the source code for the Myth games. Organized under the name MythDevelopers, this all-volunteer group of programmers, artists, and other talented people devote their time to improving and supporting further development of the Myth game series. * ^ <> Largent, Andy (October 8, 2003). "Homeworld Source Code Released" https://web.archive.org/web/20131012012745/http://www.insidemacgames.com/news/story.php?ArticleID=8516 . Inside Mac Games. Archived fromthe original http://www.insidemacgames.com/news/story.php?ArticleID=8516 on October 12, 2013. Retrieved November 24, 2012. With the release of Homeworld 2 for the PC, Relic Entertainment has decided to give back to their impressive fan community by releasing the source code to the original Homeworld. ^ <> Rosen, Lawrence <> (2004). Open Source Licensing https://archive.org/details/opensourcelicens00rose_0. Upper Saddle River: Prentice Hall, pp.52 https://archive.org/details/opensourcelicens00rose_0/page/52, 255, 259. ISBN <> 978-0-13-148787-1 <>. * ^ <> Havoc Pennington (2008-03-02). "Debian Tutorial" https://web.archive.org/web/20180129072039/https://www.debian.org/doc/manuals/debian-tutorial/ . Archived from the original http://www.debian.org/doc/manuals/debian-tutorial/ on 2018-01-29. Retrieved 2009-06-04. It is important to distinguish commercial software from proprietary software. Proprietary software is non-free software, while commercial software is software sold for money. * ^ <> Russell McOrmond (2000-01-04). "What is "Commercial Software"?" https://web.archive.org/web/20121004013215/http://www.linuxtoday.com/developer/2000010400505NWSM . Archived fromthe original http://www.linuxtoday.com/developer/2000010400505NWSM on 2012-10-04. Retrieved 2009-05-02. * ^ <> Michael K. Johnson (1996-09-01). "Licenses and Copyright" http://www.linuxjournal.com/article/1297>. Retrieved 2009-06-16. If you program for Linux, you do need to understand licensing, no matter if you are writing free software or commercial software. * ^ <> Eric S. Raymond (2003-12-29). "Proprietary, Jargon File" http://www.catb.org/~esr/jargon/html/P/proprietary.html. Retrieved 2009-06-12. Proprietary software should be distinguished from commercial software. It is possible for the software to be commercial [...] without being proprietary. The reverse is also possible, for example in binary-only freeware.

* ^ <> "Selling Free Software" https://www.gnu.org/philosophy/selling.html.

GNU Project.

^ <> "The Commercial Software Model"

https://web.archive.org/web/20070305010226/http://www.microsoft.com/presspass/exec/craig/05-03sharedsource.mspx .Microsoft <>. May 2001. Archived from the original http://www.microsoft.com/presspass/exec/craig/05-03sharedsource.mspx on 2007-03-05. * ^ <> Open Source Versus Commercial Software: Why Proprietary Software is Here to Stay https://www.informit.com/articles/article.aspx?p=420290. Sams Publishing. October 2005. Retrieved 2022-05-02. * ^ <> "Proprietary software | Definition, History, & Facts | Britannica" https://www.britannica.com/technology/proprietary-software. www.britannica.com . Retrieved2025-04-24. External links [edit <>] <> Media related to Proprietary software https://commons.wikimedia.org/wiki/Category:Proprietary_software at Wikimedia Commons * V <> * t <> * e <>Software distribution <> Licenses <> Beerware <> * Floating licensing <> * Free and open-source <> * Free <> * Open source <> * Freely redistributable <> * License-free <> * Proprietary <> * Public domain <> * Source-available <> Compensation models * Adware <> * Commercial software <> * Retail software <> * Crippleware <> * Crowdfunding <> * Freemium <> * Freeware <> * Pay what you want <> * Careware <> * Donationware <> * Open-core model <> * Postcardware <> * Shareware <>

* Nagware <>
* Trialware <>
Delivery methods
* Digital distribution <>
* File sharing <>
* On-premises <>
* Pre-installed <>
* Product bundling <>
* Retail software <>
* Sneakernet <>

* Malware <>
* Infostealer <>
* Ransomware <>
* Spyware <>
* Trojan horse <>
* Worm <>
* Scareware <>
* Shovelware <>

* Software as a service <> Deceptive and/or illicit

Software release life cycle <>
* Abandonware <>
* Long-term support <>
* Software maintenance <>
* Software maintainer <>
* Software publisher <>
* Vaporware <>
* Iist <>

* Digital rights management <> * Software protection dongle <> * License manager <>

Copy protection <>

* Unwanted software bundling <>

```
* Product activation <>
* Product key <>
* Software copyright <>
* Software license server <>
* Software patent <>
* Torrent poisoning <>
* t <>
* e <>Free and open-source software <>
General
 * Alternative terms for free software <>
* Comparison of open-source and closed-source software <>
* Comparison of source-code-hosting facilities <>
* Free software <>
* Free software project directories <>
* Gratis versus libre <>
* Long-term support <>
* Open-source software <>
* Open-source software development <>
* Outline <>
* Timeline <>
Software
packages <>
 * Audio <>
* Bioinformatics <>
* Codecs <>
* Configuration management <>
* Drivers <>
* Graphics <>
* Wireless <>
* Health <>
* Mathematics <>
* Office suites <>
* Operating systems <>
* Routing <>
* Television <>
* Video games <>
* Web applications <>
* E-commerce <>
* Android apps <>
* iOS apps <>
* Commercial <>
* Formerly proprietary <>
* Formerly open-source <>
Community <>
* Free software movement <>
* History <>
* Open-source-software movement <>
* Events <>
* Advocacy <>
Organisations <>
* Free Software Movement of India <>
* Free Software Foundation <>
Licenses <>
 * AFL <>
* Apache <>
* APSL <>
* Artistic <>
* Beerware <>
* BSD <>
* Creative Commons <>
* CDDL <>
* EPL <>
* Free Software Foundation <>
* GNU GPL <>
* GNU AGPL <>
* GNU LGPL <>
* ISC <>
* MIT <>
* MPL <>
* Python <>
* Python Software Foundation License <>
* Shared Source Initiative <>
* Sleepycat <>
* Unlicense <>
```

* WTFPL <>

* zlib <> Types and standards * Comparis * Contribut

* Comparison of licenses <>

* Contributor License Agreement <>

* Copyleft <>

* Debian Free Software Guidelines <>

* Definition of Free Cultural Works <>

* Free license <>

* The Free Software Definition <>

* The Open Source Definition <>

* Open-source license <>

* Permissive software license <>

* Public domain <>

Challenges

* Digital rights management <>

* License proliferation <>

* Mozilla software rebranding <>

* Proprietary device drivers <>

* Proprietary firmware <>

* Proprietary software <>

* SCO/Linux controversies <>

* Software patents <>

* Software security <>

* Tivoization <>

* Trusted Computing <>

Related

topics

* Forking <>

* GNU Manifesto <>

* Microsoft Open Specification Promise <>

* Open-core model <>

* Open-source hardware <>

* Shared Source Initiative <>

* Source-available software <>

* The Cathedral and the Bazaar <>

* Revolution OS <>

* <> Portal <>

* Category <> Retrieved from "

https://en.wikipedia.org/w/index.php?title=Proprietary_software&oldid=1300034318

https://en.wikipedia.org/w/index.php?title=Proprietary_software&oldid=1300034318

" Categories <>:

* Proprietary software <>

* Software licensing <>

* Intellectual property law <>Hidden categories:

* Harv and Sfn no-target errors <>

* Articles with short description <>

* Short description is different from Wikidata <>

* All articles with unsourced statements <>

* Articles with unsourced statements from March 2017 <>

* Articles with excerpts <>

* Articles with unsourced statements from March 2012 <>

* Articles with unsourced statements from November 2010 <>

* Wikipedia articles needing clarification from January 2018 <>

* Commons category link from Wikidata <>

* This page was last edited on 11 July 2025, at 22:42 (UTC).

* Text is available under the Creative Commons Attribution-ShareAlike 4.0

License <>; additional terms may apply. By using this site, you agree to the

Terms of Use

andPrivacy Policy">https://foundation.wikimedia.org/wiki/Special:MyLanguage/Policy:Terms_of_Use>andPrivacy Policy

https://foundation.wikimedia.org/wiki/Special:MyLanguage/Policy:Privacy_policy>

. Wikipedia is a registered trademark of the Wikimedia Foundation, Inc.

https://wikimediafoundation.org/, a non-profit organization.

* Privacy policy

https://foundation.wikimedia.org/wiki/Special:MyLanguage/Policy:Privacy_policy>

* About Wikipedia <>

* Disclaimers <>

* Contact Wikipedia <>

* Code of Conduct

https://foundation.wikimedia.org/wiki/Special:MyLanguage/Policy:Universal_Code_of_Conduct

* Developers https://developer.wikimedia.org

* Statistics https://stats.wikimedia.org/#/en.wikipedia.org

* Cookie statement

https://foundation.wikimedia.org/wiki/Special:MyLanguage/Policy:Cookie_statement

Public Domain

https://raw.githubusercontent.com/MeterianHQ/licenses-and-copyrights/master/corner-cases/public-domain.txt

This is not a real license, neither a copyright.

"Public domain" is a specialized term in copyright law that alludes to works not under copyright, either in light of the fact that they were never in copyright in the first place (for instance, works created by U.S. government representatives, on government time and as an aspect of their responsibilities, are naturally in the public domain), or on the grounds that their copyright term has at long last passed and they have "fallen into" the public domain.

To learn more:

https://opensource.org/faq#public-domain https://en.wikipedia.org/wiki/Public_domain